VERMILION 92(11,12,12-1)RS... I&R copy ~~4-9-93~~ #116

95%
7-16-94

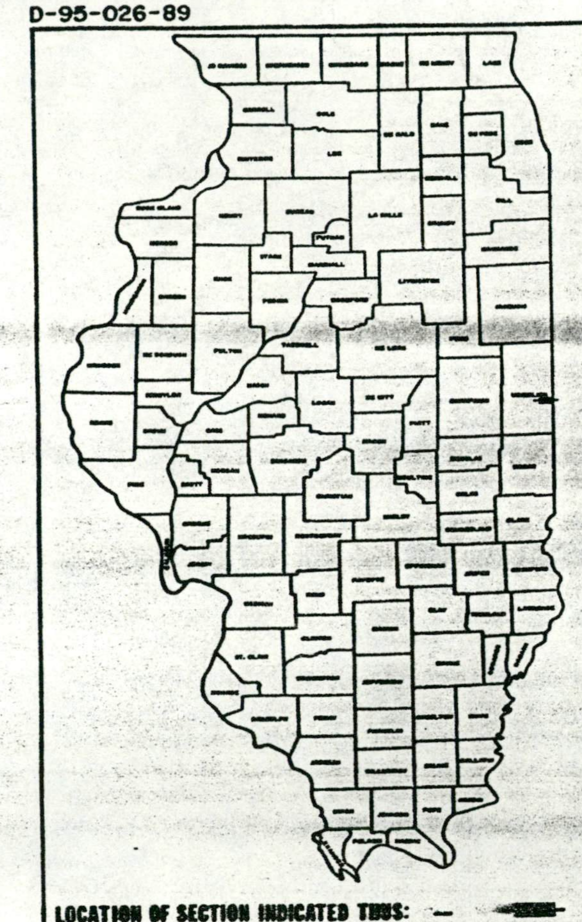
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	VERMILION	361	1
F.HW.A. REG.		ILLINOIS	PROJECT	

* 92(11,12,12-1)RS & (92-12HB-2)BRK

D-95-026-89

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED
FEDERAL AID INTERSTATE HIGHWAY



LOCATION OF SECTION INDICATED THUS:

FOR INDEX OF SHEETS, SEE SHEET NO. 26-27
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 31-39

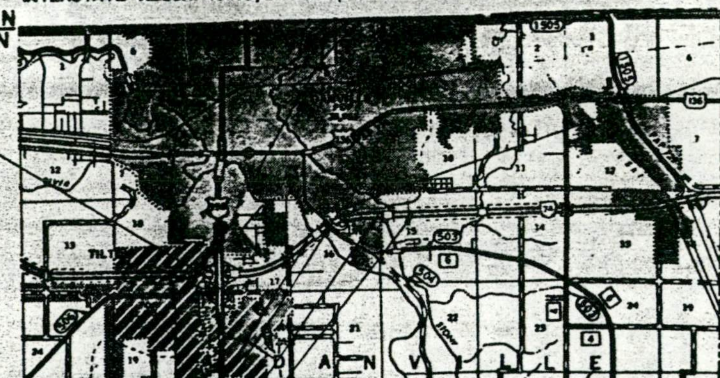
SCALES
- PLAN 1" = 20', 40', 50', 100'
- PROFILE HOR. 1" = 20'
- PROFILE VERT. 1" = 2'
- CROSS-SECTIONS HORIZ. 1" = 5' VERT. 2'; HORIZ. 1" = 10' VERT. 5'

F.A.I. ROUTE 74
SECTION 92(11,12,12-1)RS & (92-12 HB-2)BRK
VERMILION COUNTY
PROJECT IM-74-6 (138) 215

C-95-126-90

INTERSTATE RESURFACING, BRIDGE & INTERCHANGE RECONSTRUCTION

T.20N
T.19N



R.12 W. R.11 W. R.11 W. R.10 W.

T.20N
T.19N

SECTION (92-12 HB-2)BRK
STATION 2010+38.49

RROJECT IM-74-6 (138)215 AND
SECTION 92(11,12,12-1)RS & (92-12HB-2)BRK
BEGINS STATION 1908+00

PROJECT IM-74-6 (138) 215 AND
SECTION 92(11,12,12-1)RS & (92-12HB-2)BRK
ENDS STATION 2231+53.37

OMISSIONS FROM RESURFACING & SECTION:

SECTION (92-12VB-1)BR
STATION 2201+52.71 TO STATION 2205+23.71

SECTION (92-12HB-6)BR
STATION 2212+53.09 TO STATION 2215+10.94

SECTION (92-12HB-4, B-1)BR
STATION 2029+35 TO STATION 2052+65

SECTION (92-12B)BR
STATION 1988+60 TO STATION 2001+95

0 5,000 10,000
SCALE: FEET

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED December 23 1992 J.D. Benson DISTRICT ENGINEER

EXAMINED 19

PASSED Jan. 29 1993 Gary Gould ENGINEER OF PLANS AND CONTRACTS / ENGINEER OF DESIGN

APPROVED Jan. 29 1993 Ralph C. Wehner DIRECTOR DIVISION OF HIGHWAYS

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ADMINISTRATOR DATE

DESIGN DESIGNATION
3140 (93) INTERSTATE - 7.08 (COMP-6)
1775 (93) INTERSTATE - 6.28 (COMP-6)

TOTAL LENGTH OF SECTION 92(11,12,12-1)RS & (92-12HB-2)BRK = 32,353.37 FEET = 6.128 MILES
NET LENGTH OF SECTION 92(11,12,12-1)RS & (92-12HB-2)BRK = 28,059.52 FEET = 5.314 MILES

TOLL FREE J.U.L.I.E. TELEPHONE NO.
1-800-892-0123
DANVILLE TOWNSHIP

PRINTED BY AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 90216 092-0129

SQUAD LEADER: SCOTT LACKEY PROJECT ENGINEER:

Sheets 1 Thru 100 (Set 1 of 4)

VERMILION COUNTY SECTION * 92(11,12,12-1)RS & (92-12HB-2)BRK F.A.I. ROUTE 74

5-169

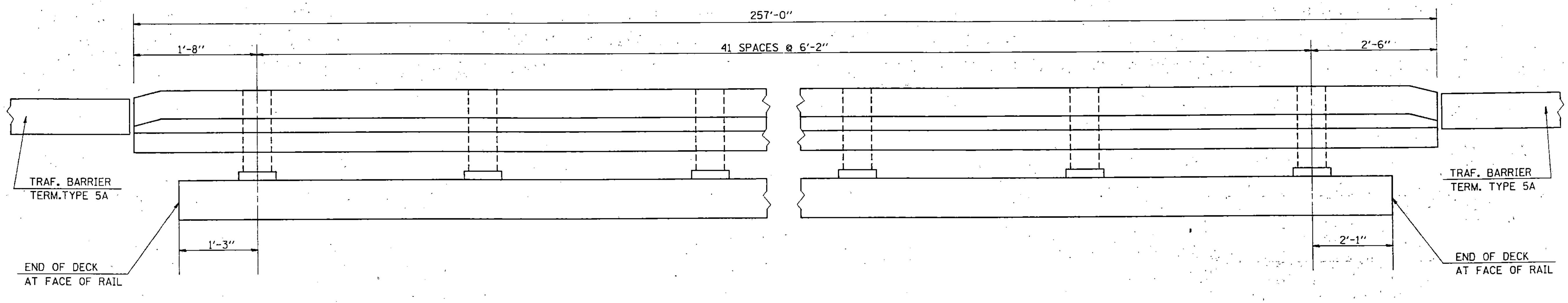
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	VERMILION	361	233

* 92(11,12,12-1)RS & (92-12HB-2)BRK

DETAIL OF POST SPACING FOR STEEL BRIDGE RAIL

STRUCTURE: 092-0129
(RT. AHEAD SKEW)

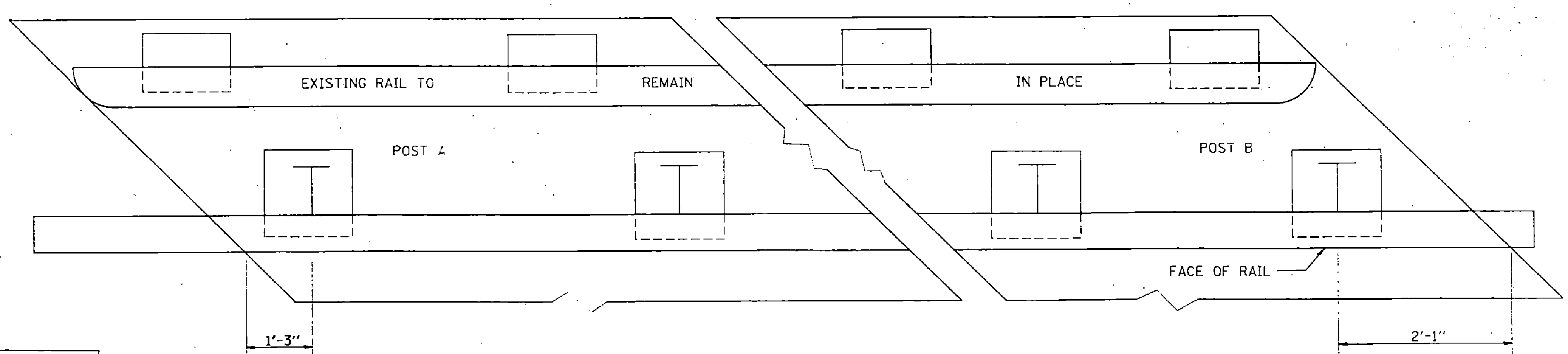
GREENWOOD CEMETERY ROAD
SEC. 92-12HB
A.R. STA. 1971+24



* (SEE SPECIAL PROVISIONS FOR TRAFFIC BARRIER TERMINAL, TYPE 5A, SPECIAL)

ELEVATION

FACE OF PROPOSED RAIL TO BE PLACED FLUSH WITH FACE OF EXISTING CURB



PLAN

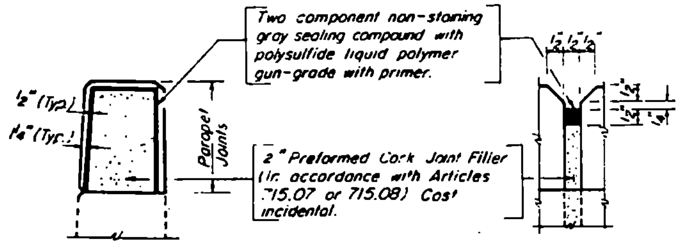
	NAME	DATE
DESIGNED	D.K.S.	8-91
CHECKED	J.M.H.	9-91
CADD NO.	F-5.27	

REVISIONS	
NAME	DATE

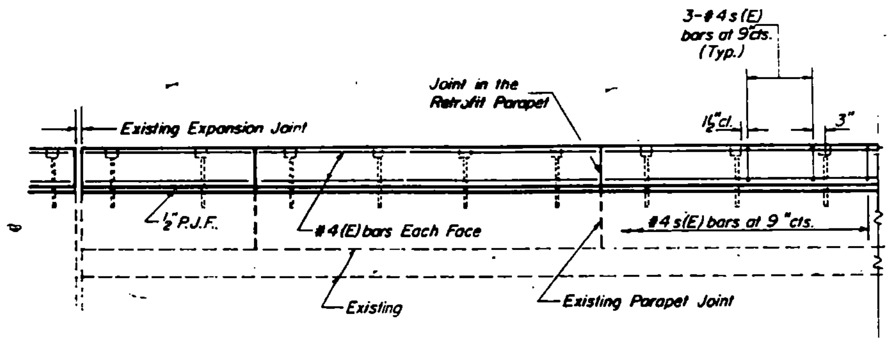
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-74	*	VERMILION	361	237	SHEET NO / SHEETS

* (92-11,12,12-1)RS ¢ (92-12HB-2)BRK

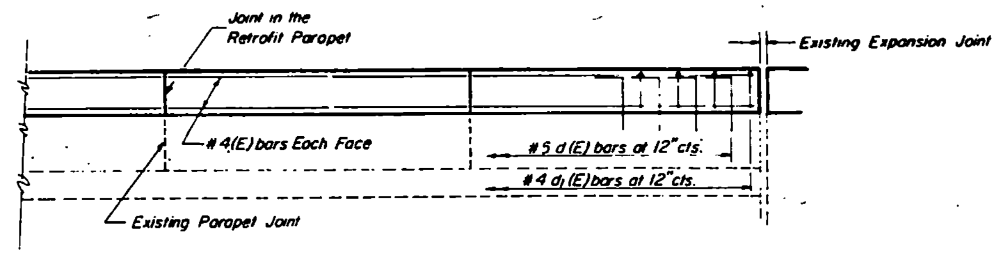


JOINT DETAIL



INSIDE ELEVATION OF PARAPET

PRECAST ALTERNATE



INSIDE ELEVATION OF PARAPET

CAST-IN-PLACE ALTERNATE

GENERAL NOTES

Class X Concrete shall be used throughout.

All exposed edges shall be chamfered 3/4".

Class X Concrete, Reinforcement Bars (E), Threaded Anchor Rods, 1/2" P.J.F. and all other accessories needed for installation and erection will be paid for at the unit price per lineal foot for Retrofit Concrete Parapet.

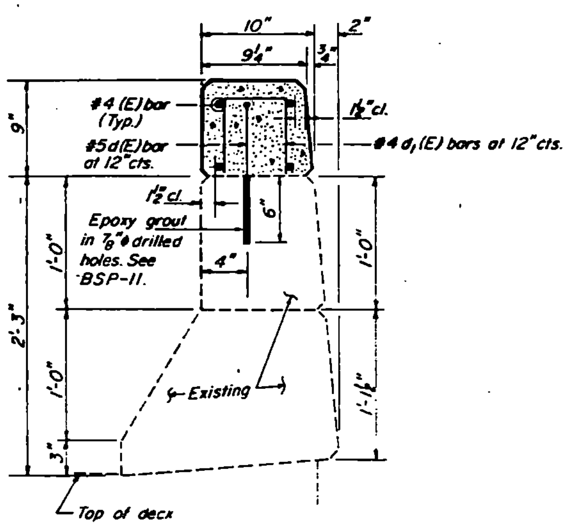
The Contractor shall use the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes in accordance with the manufacturer's recommendations and procedures.

The capsule or the adhesive cartridge shall be a sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amount of adhesive chemical. The threaded rod stud with nut & washers shall conform to ASTM A-307.

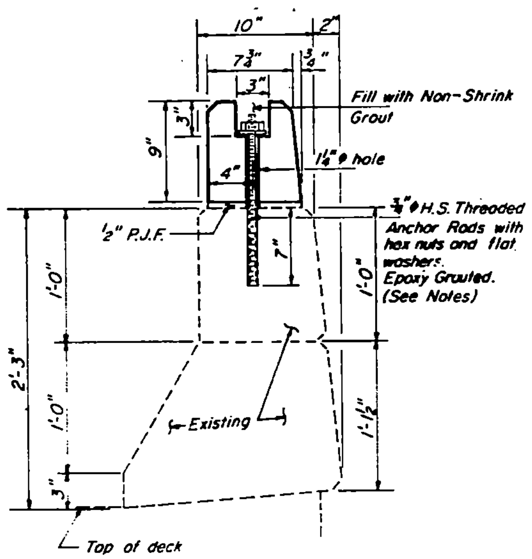
The existing 3/4" ϕ and 1" ϕ welded studs shall be burned, sawed or chipped off flush with the top of the existing parapet.

Holes for the dowel rods shall miss existing parapet joints.

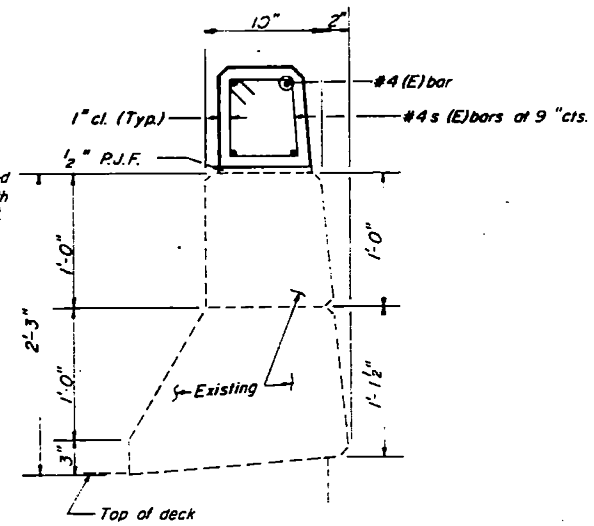
The precast sections may be cast in units of 3', 5', 7' --- etc. length as desired. Where they overlap the joints in the parapet, the precast units shall be saw cut to line up with the joints in the parapet. The sawcut faces of the units shall be given a coat of boiled linseed oil mixture (Protective Coat).



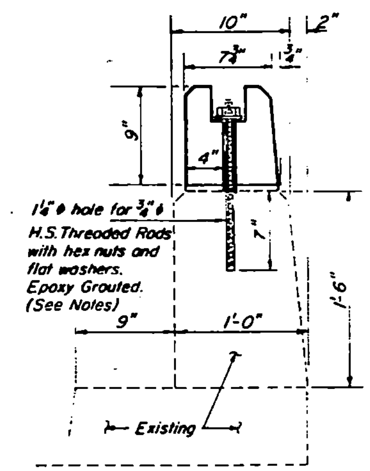
CAST-IN-PLACE



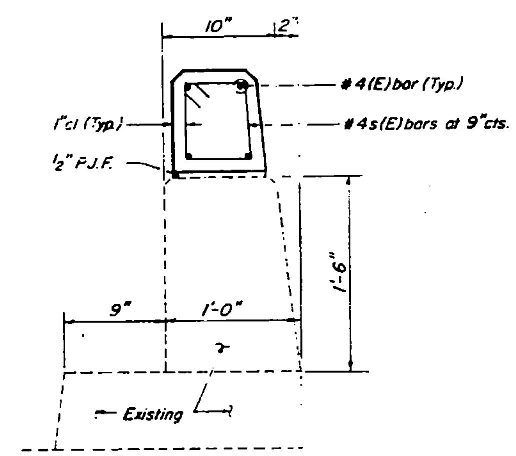
PRECAST
(Showing Attachment)



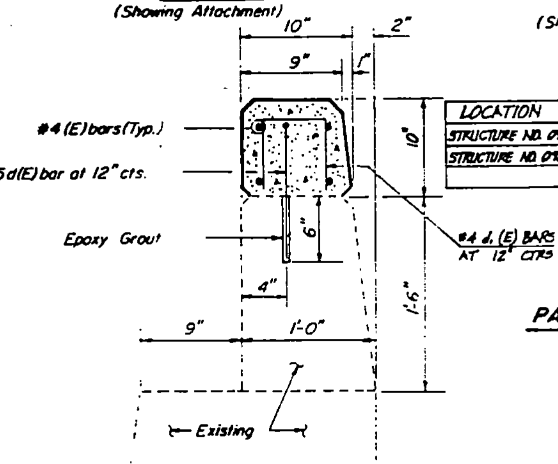
PRECAST
(Showing Reinforcement)



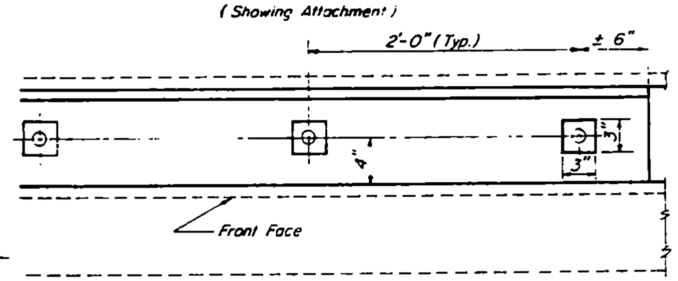
PRECAST
(Showing Attachment)



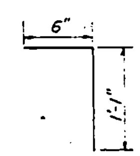
PRECAST
(Showing Reinforcement)



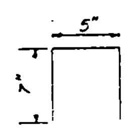
CAST-IN-PLACE



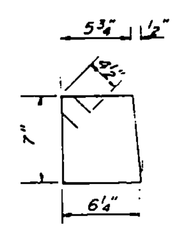
TOP VIEW
(Showing spacing of 3/4" ϕ H.S. Threaded Rods)



BAR d(E)



BAR d1(E)



BAR s(E)

BILL OF MATERIAL

LOCATION	ITEM	UNIT	QUANTITY
STRUCTURE NO. 092-00[illegible]	Retrofit Concrete Parapet	Lin. Ft.	360.0
STRUCTURE NO. 092-00[illegible]	RETROFIT CONCRETE PARAPET	LIN. FT.	360.0

PARAPET RETROFIT FOR ALUM. HANDRAIL

DESIGNED	EXAMINED 19
CHECKED	PASSED
DRAWN	APPROVED
CHECKED	

FEDERAL AID ROUTE NO	SEC.	COUNTY	TOTAL SHEETS	SHEET NO
74	92-12HB	VERMILION	43	1
FED ROAD DIST NO 7	ILLINOIS	PROJECT I-74-6(41)217		

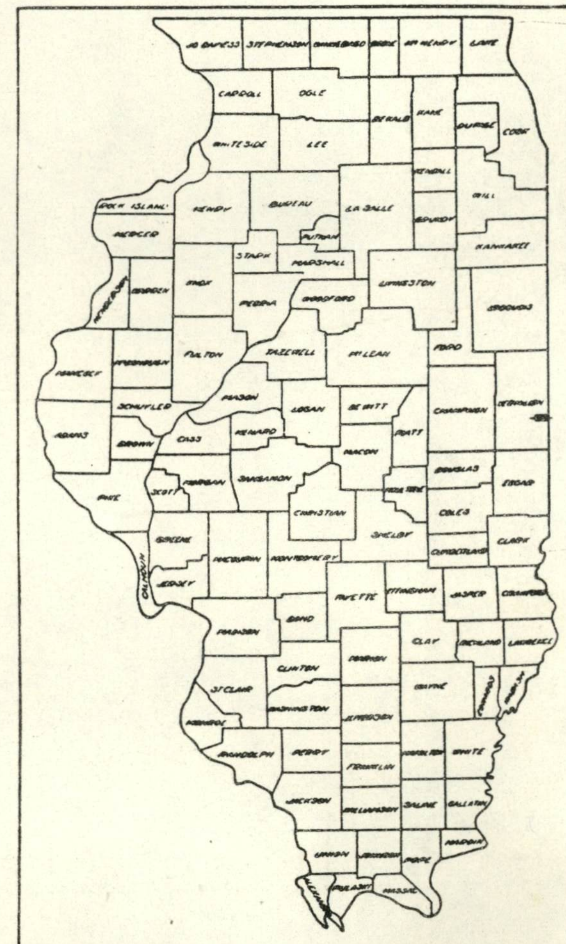
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

FOR INDEX OF SHEETS - SEE SHEET NO. 3.
FOR SUMMARY OF QUANTITIES - SEE SHEET NO. 3.

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

SCALES
- PLAN 1 INCH 100 FT
- PROFILE HOR 1 INCH 100 FT
- PROFILE VERT 1 INCH 10 FT
- CROSS SECTIONS 1 INCH 5 FT

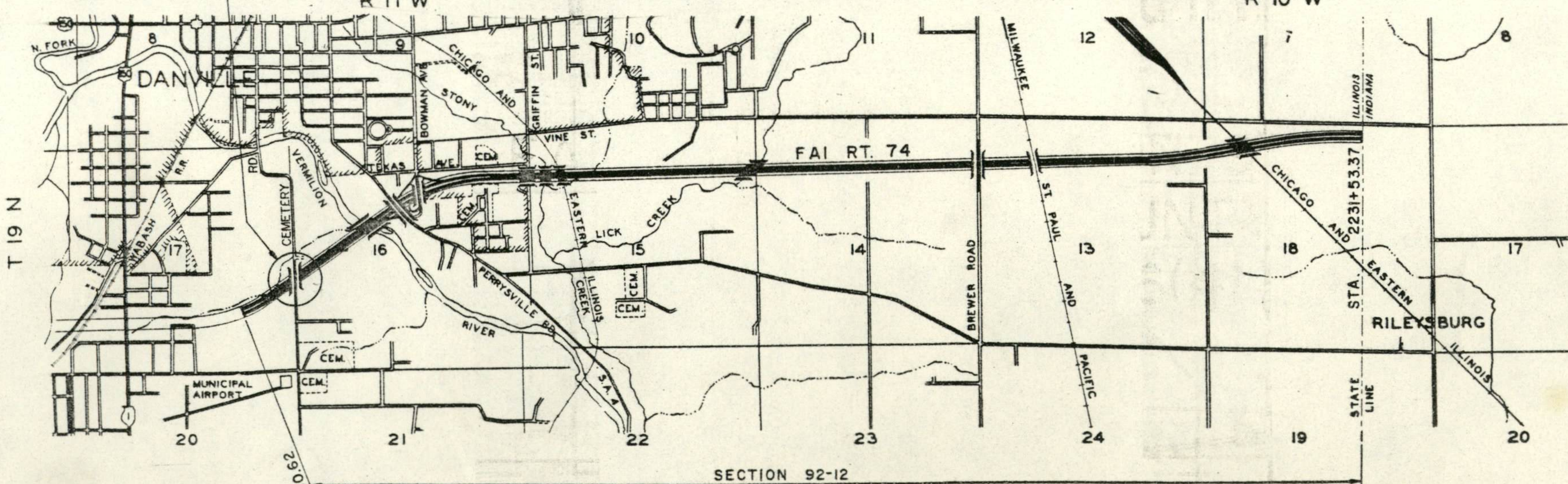
F.A.I. ROUTE 74, SECTION 92-12HB
VERMILION COUNTY
PROJECT I-74-6(41) 217



PLANS FOR STRUCTURES EXAMINED AUG 11 61
W. E. Bamman
ENGINEER OF BRIDGE & TRAFFIC STRUCTURES

FILE COPY
9-19-61

SECTION 92-12HB INCLUDES A 4 SPAN REINFORCED CONCRETE GRADE SEPARATION STRUCTURE. SPANS 48'-6". 69'-0". 69'-0".& 66'-6" WITH 24'-0" ROADWAY WIDTH AND 2'-0" SAFETY WALKS ON REINFORCED CONCRETE PIERS AND ABUTMENTS AT STATION 1971+24.72 TOGETHER WITH GRADING AND SURFACING AT THE CROSSROAD



STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS AND BUILDINGS DIVISION OF HIGHWAYS		
SUBMITTED	July 10 1961	J. J. Cychol, DISTRICT ENGINEER
EXAMINED	August 16, 1961	A. W. Van Auradall, ENGINEER OF ROAD PLANS AND CONTRACTS
PASSED	August 16, 1961	Shrentz, ENGINEER OF DESIGN
APPROVED	August 16, 1961	M. M. ..., CHIEF HIGHWAY ENGINEER
APPROVED	August 1961	R. J. Bayes Jr., DIRECTOR

FILE COPY

DEPARTMENT OF COMMERCE BUREAU OF PUBLIC ROADS	
APPROVED	
DIVISION ENGINEER	DATE

#43

PLANS PREPARED BY
CONSOER TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS
360 EAST GRAND AVE.
CHICAGO, ILL.

92-12 HB VERMILION
092-0129

Reel 5-38

NET LENGTH OF PROJECT I-74-6(41)217 = 0.00 FT. = 0.00 MILE

FA I 74	92-12 HB	VERMILION	43	3

GENERAL NOTES - ROADWAY

All Elevations are on United States Geological Survey Datum.

Grade elevations on Plan and Profile Sheets and Station Cross-Sections apply as follows:

Cross-Road, Station 40+00 to 57+00 - the center of the surfaced way.

A Bituminous Surface Course, Sub-Class A-3 shall be constructed in accordance with the Typical Section shown, and as directed by the Engineer on the Cross-Road at F.A.I. Rte. 74, Station 1971+24.72.

ESTIMATED QUANTITIES:

1,330	Gals.	BITUMINOUS MATERIALS, PRIME COAT A-3
2,570	Gals.	BITUMINOUS MATERIALS (COVER & SEAL COATS)
82	Tons	COVER COAT AGGREGATE
41	Tons	SEAL COAT AGGREGATE

A Gravel or Crushed Stone Base Course, Type A, shall be placed uniformly 7 inches thick, compacted, in accordance with the Typical Section shown, under all Bituminous Surfacing Sub-Class A-3.

ESTIMATED QUANTITY:

1,454	Tons	GRAVEL OR CRUSHED STONE BASE COURSE, TYPE A

Where indicated on the Cross Sections and as may be directed by the Engineer, Top Soil, 4 inches thick shall be placed.

ESTIMATED QUANTITY:

1,762	Cu.Yds.	TOP SOIL

Earth Shoulders, ditches, and other areas between the Right-of-Way lines indicated for Greenwood Cemetery Road having insufficient cover or unsatisfactory vegetation shall be seeded as directed by the Engineer. No seeding is to be done on that part of the Right-of-Way considered to be a part of F.A.I. Rte. 74.

ESTIMATED QUANTITIES:

2.7	Acres	TEMPORARY SEEDING
2.7	Acres	COMPLETE SEEDING

On all areas to be seeded, Fertilizer Nutrients and Agricultural Ground Limestone shall be applied as directed by the Engineer.

ESTIMATED QUANTITIES:

0.5	Ton	FERTILIZER NUTRIENTS
16	Tons	AGRICULTURAL GROUND LIMESTONE

Earth Shoulders and all areas having a slope of 4:1, or steeper shall be covered with asphalt-coated mulch as directed by the Engineer.

ESTIMATED QUANTITIES:

5	Tons	STRAW FOR ASPHALT-COATED MULCH
500	Gals.	EMULSIFIED ASHPALT

A strip of sod 18 inches wide shall be placed on each side of all paved ditches and all paved ditch transitions as directed by the Engineer.

ESTIMATED QUANTITY:

175	Sq.Yds.	SODDING

All trees that interfere with construction operations shall be removed as directed by the Engineer.

ESTIMATED QUANTITIES:

170	In.Dia.	TREE REMOVAL (6" TO 15" DIA.)
270	In.Dia.	TREE REMOVAL (OVER 15" DIA.)
8.4	Acres	TREE REMOVAL (ACRES)

Existing Guard Posts on Cemetery Road shall be removed and stored within the limits of the Right-of-Way

ESTIMATED QUANTITY:

88	Each	GUARD POST REMOVAL

At locations indicated on the plans and as directed by the Engineer, Right-of-Way Markers shall be furnished and erected.

ESTIMATED QUANTITY:

13	Each	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS

Before ordering pipe culverts, the Contractor shall consult the Engineer for exact lengths.

TYPICAL SECTION AND CROSS-SECTIONS

Finished cross-sections of the work shall conform to the Typical Cross-Sections shown on the plans. Earthwork and other Quantities have been estimated on the basis of these Typical Sections.

GENERAL NOTES - BRIDGE

Class X Concrete shall be used throughout.

Superstructure Slab shall be finished in accordance with Article 51.19 of the Standard Specifications.

All Rockers, Bearing Plates, Masonry Plates, Pintles, Anchor Bolts, Bolts and Nuts, Lead Plates, and all parts of Expansion Guards and Devices shall be fabricated and set in accordance with Article 51.13 and Article 51.15 of the Standard Specifications and are included for payment as "Furnishing and Erecting Structural Steel".

All surfaces of Structural Steel which will be exposed after erection shall receive one coat of red lead paint and two field coats of Aluminum paint. All paint to be furnished and applied by the Contractor and included in the unit price bid for "Furnishing and Erecting Structural Steel".

4" Concrete Slope Wall shall be reinforced with welded wire fabric, 6" x 6" mesh, #4 wires, weighing 58 pounds per 100 sq. ft.

Test Piles. The Contractor shall drive two test piles in permanent location before driving the remainder of the piles. One test pile at North Abutment and one test pile at pier No. 2.

Piles in abutments shall be driven in holes precored to natural ground in accordance with Article 60.9 (c) of the Standard Specifications.

Coarse Aggregate used in parapet handrails and end posts must be absolutely free of chert, flint, limonite, lignite and soft sandstone.

Wherever reference is made in these plans to the Standard Specifications, it is understood to include the supplemental Specifications, effective 1 July 1961.

DESIGN DATA

Design Specifications :	A.A.S.H.O. 1957 Edition		
Design Load :	H15-S12-44		
Unit Stresses :	Structural Steel	f_s =	18,000 p.s.i.
	Reinforcing Steel	f_s =	20,000 p.s.i.
Concrete Ultimate Compression		f'_c =	3,500 p.s.i.
Allowable Compression (no earth pressure)		f_c =	1,400 p.s.i.
Allowable Compression (with earth pressure)		f_c =	1,000 p.s.i.
Modular Ratio		n =	10
Horizontal Earth Pressure (Equiv. Liquid Pressure)			40 p/cf
Concrete Piles, Maximum Load			25 Tons at Abuts.
Timber Piles, Capacity			20 Tons at Pier
Pier Footing Shear		V =	75 p.s.i.

SUMMARY OF QUANTITIES

QUANTITY	UNIT	ITEM	CODE NUMBER
170	IN.DIA.	TREE REMOVAL (6" TO 15" DIA.)	010001
270	IN.DIA.	TREE REMOVAL (OVER 15" DIA.)	010002
8.4	ACRES	TREE REMOVAL - ACRES	010005
46,504	CU.YD.	EARTH EXCAVATION	011001
1,762	CU.YD.	TOP SOIL	027001
1,454	TON	GRAVEL OR CRUSHED STONE BASE COURSE, TYPE A	029001
1,330	GAL.	BITUMINOUS MATERIALS (PRIME COAT)	039001
2,570	GAL.	BITUMINOUS MATERIALS (COVER & SEAL COATS)	039002
82	TON	COVER COAT AGGREGATE	039003
41	TON	SEAL COAT AGGREGATE	039004
400	CU.YD.	CLASS A EXCAVATION FOR STRUCTURES	050001
10,710	POUND	FURNISHING & ERECTING STRUCTURAL STEEL	051002
735.6	CU.YD.	CLASS X CONCRETE	052003
24.8	CU.YD.	CLASS X CONCRETE (HEADWALL)	052016
48	LIN.FT.	PIPE CULVERTS, TYPE 1, 15"	058199
220	LIN.FT.	PIPE CULVERTS, TYPE 4, RCP CLASS III, 72"	058752
132,980	POUND	REINFORCEMENT BARS	059001
390	LIN.FT.	FURNISHING CREOSOTED PILES, UP TO 20 FEET	060004
1	EACH	TEST PILES (TIMBER)	060007
390	LIN.FT.	DRIVING TIMBER PILES	060008
566	LIN.FT.	DRIVING CONCRETE PILES	060043
566	LIN.FT.	FURNISHING CONCRETE PILES	060044
1	EACH	TEST PILES (CONCRETE)	060047
2	EACH	NAME PLATES	061001
517	SQ.YD.	SLOPE WALL 4"	083002
489	LIN.FT.	PAVED DITCH, 6 FEET	091005
1,525	LIN.FT.	STEEL PLATE BEAM GUARD RAIL	094001
88	EACH	GUARD POST REMOVAL	096003
13	EACH	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	104001
2.7	ACRE	TEMPORARY SEEDING	110001
2.7	ACRE	COMPLETE SEEDING	110004
0.5	TON	FERTILIZER NUTRIENTS	110005
16	TON	AGRICULTURAL GROUND LIMESTONE	110006
5	TON	STRAW FOR ASPHALT-COATED MULCH	111002
500	GAL.	EMULSIFIED ASPHALT	111003
175	SQ.YD.	SODDING	112001
513	LIN.FT.	ALUMINUM HANDRAIL	Z00004
1	LUMP SUM	REMOVING BUILDING NO. 1	Z00646
1	LUMP SUM	REMOVING BUILDING NO. 2	Z00647

SUMMARY OF CLASS X CONCRETE
TYPE OF STRUCTURE

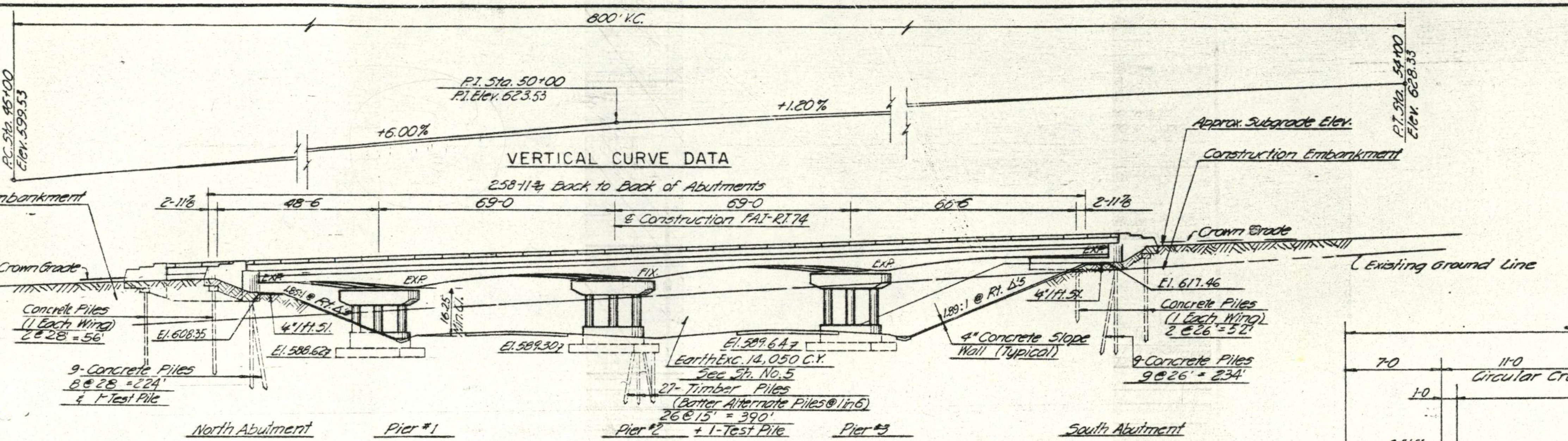
SIDE	STATION	(MAINLINE)	CLASS X CONC. CU.YDS.	CLASS X CONC. (HDWL) CU.YDS.
AR	1971+24.72	SPEC. BRIDGE	728.4	
		CROSS ROAD @ STA. 1971+24.72		
AR	44+12	1998-DS 72-2 (2) HEADWALL		24.8
LT.	46+85	SPEC. TRANSITION FOR PAVED DITCH	1.9	
RT.	51+31	SPEC. TERMINATION FOR PAVED DITCH	3.4	
RT.	52+70	SPEC. TERMINATION FOR PAVED DITCH	1.9	
		TOTALS	735.6	24.8

CLASS X CONCRETE	735.6	CU.YDS.
CLASS X CONCRETE (HEADWALL)	24.8	CU.YDS.

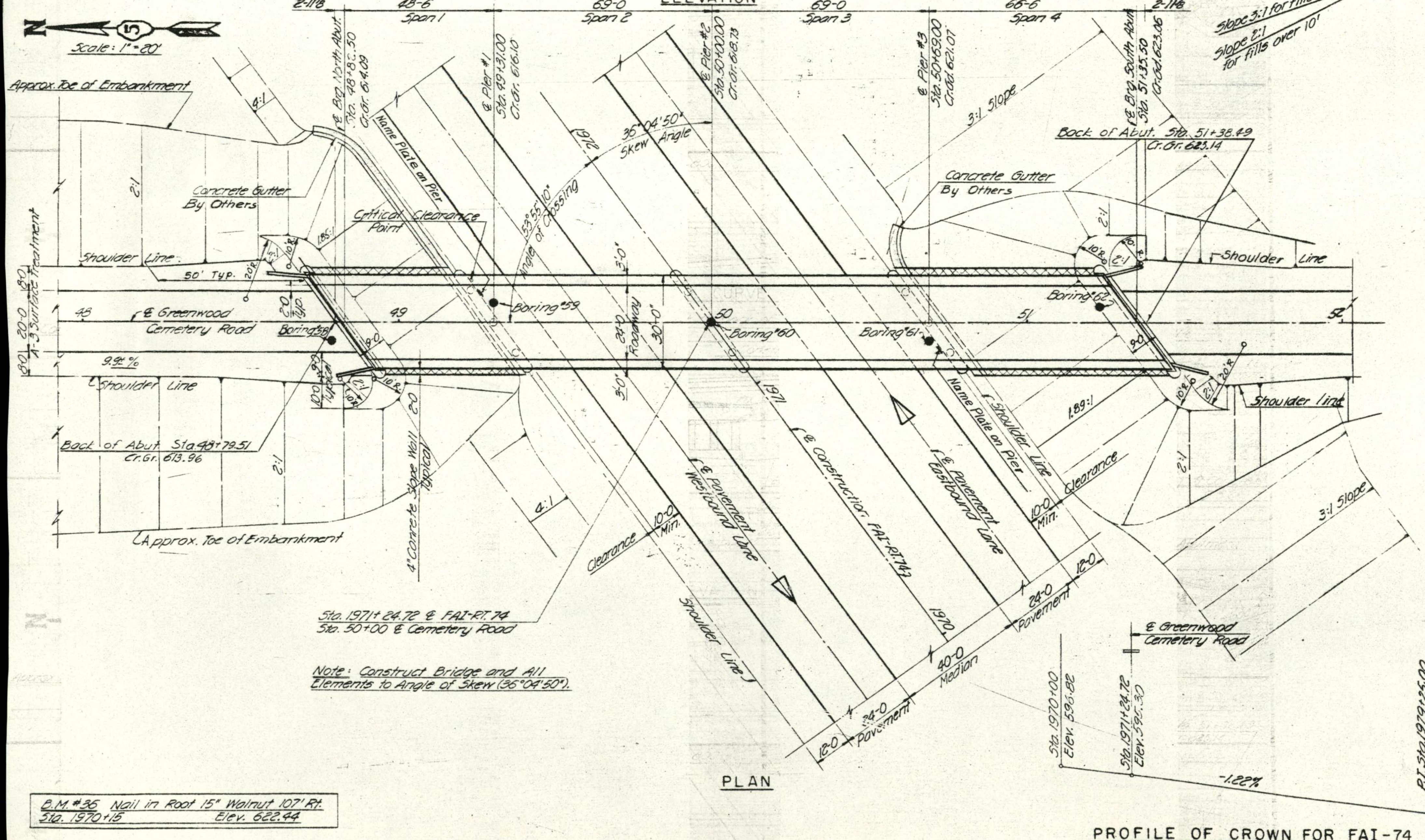
INDEX OF SHEETS

SHEET NO.	DRAWINGS
1	TITLE SHEET
2	TYPICAL SECTIONS
3	INDEX OF SHEETS & GENERAL NOTES SUMMARY OF QUANTITIES AND SUMMARY OF CLASS X CONCRETE
4	CROSS ROAD PLAN & PROFILE
5	F.A.I. RTE. 74 PLAN & PROFILE
6	GENERAL PLAN AND LOCATION
7	BORING LOGS
8 - 16	SUPERSTRUCTURE DETAILS
17	HANDRAIL DETAILS
18	STRUCTURAL STEEL - JOINT DETAILS
19	STRUCTURAL STEEL - BEARING DETAILS
20 - 22	ABUTMENTS
23 - 24	PIERS
25	PILE DETAILS
26	SPECIAL DETAILS: TRANSITION, PIPE CULVERT TO PAVED DITCH; PAVED DITCH DETAILS
27	SPECIAL DETAILS: TRANSITION FOR PAVED DITCH
28	SPECIAL DETAILS: PIPE OUTLET AND PAVED DITCH TERMINATION
29	CULVERT HEADWALL AT STA. 44+12
30 - 32	STATION CROSS-SECTIONS; CROSSROAD
33 - 41	STATION CROSS-SECTIONS; MAINLINE
42	STANDARDS; 1687-3; 2113
43	STANDARDS; 1744-1; 1971-3; 1972-1

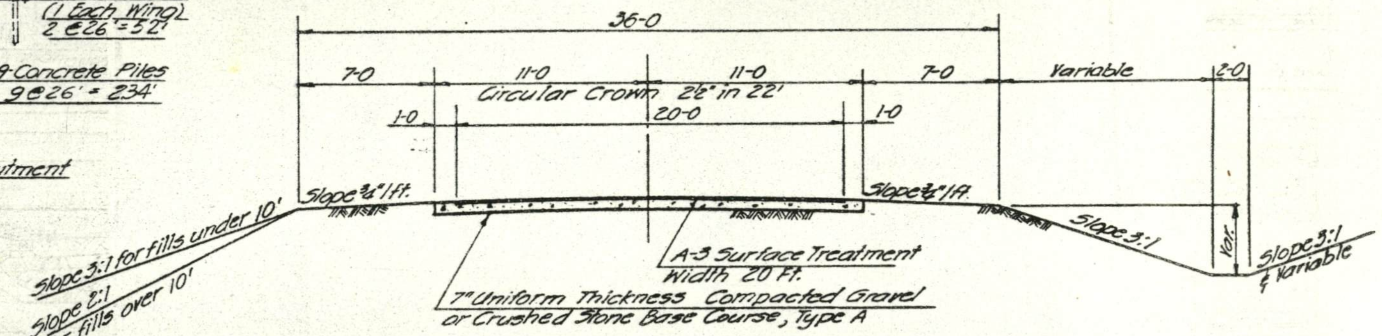
F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	92-12HB	VERMILION	43	6
FEDERAL ROAD DISTRICT NO. 7		ILLINOIS	PROJ.	



ELEVATION

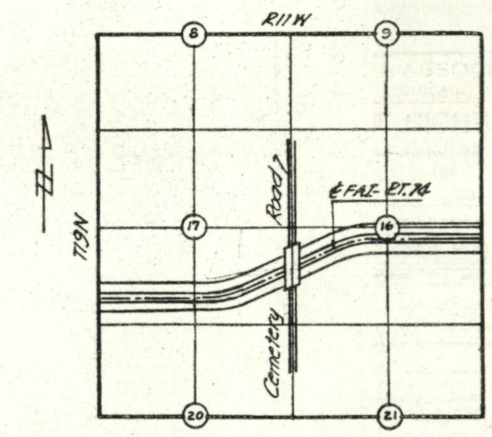


B.M. #36 Nail in Root 15" Walnut 107' Rt.
Sta. 1970+15 Elev. 622.44



TYPICAL APPROACH ROADWAY CROSS SECTION
Scale: 1" = 5'

Cemetery Road
Roadway Classification D
Existing 16' Bituminous Road



BRIDGE LOCATION

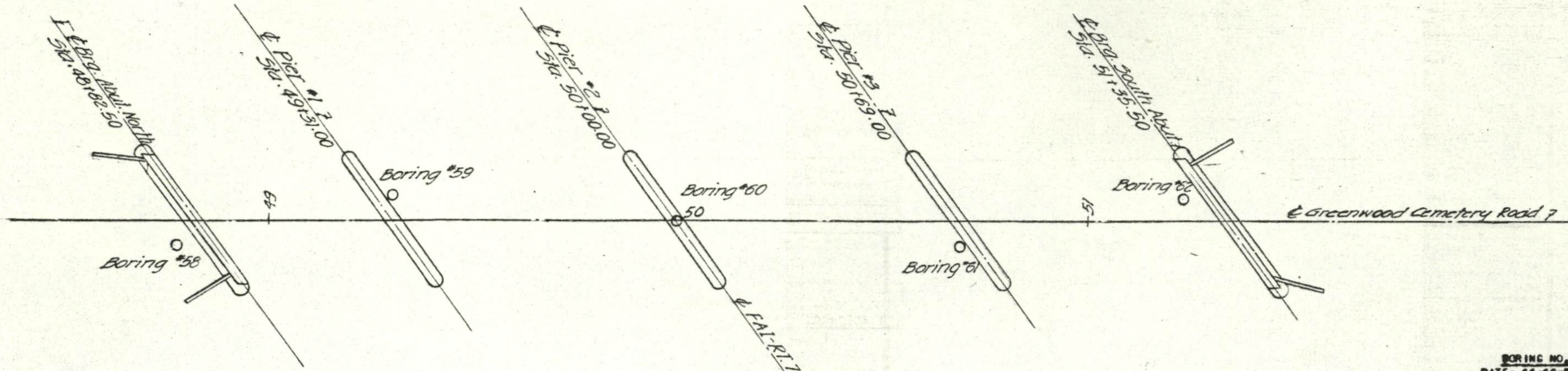
CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS CHICAGO, ILLINOIS

ILLINOIS DIVISION OF HIGHWAYS
CEMETERY ROAD OVER FAI. RT. 74
FAI-74 SECTION 92-12HB
VERMILION COUNTY STA. 1971+24.72

GENERAL PLAN AND LOCATION

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE
RLF	RLF	DS	RLF LDB	HSM	10-15-60

F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	92-12HB	VERMILION	43	7
FEDERAL ROAD DISTRICT NO. 7		ILLINOIS	PROJ.	



PLAN OF BORING LOCATIONS

BORING	STATION	OFFSET
58	48+77	6' R.
59	49+30	6' L.
60	50+00	on CL
61	50+70	6' R.
62	51+23	6' L.

BORING NO. 58
DATE: 11-15-57
GROUND ELEVATION: +598.9'

+598.9' GROUND SURFACE

E	S	PR	QU	R	CLASSIFICATION
97.9					BLACK TOP SOIL-LOOSE (M)
97.0	1	22	-	0.3	SAND & SILT-SOME GRAVEL TRACE OF CLAY-BR.-FILL-(M) MED.DENSE
96.9					
95.9	2	29	3.7	0.3	SILT-SOME CLAY & SAND-TRACE OF GRAVEL-BROWN-(M) MED.DENSE
94.9					
93.9	3	33	-	0.3	
92.9					
91.9	4	38	-	0.4	SILT-SOME CLAY & SAND-TRACE OF GRAVEL-BROWN-DENSE (M)
90.9					
89.9					
88.9					
87.9	5	47	-	0.5	
86.9					CLAY-SOME SILT-TRACE OF SAND-DARK GRAY-HARD (D)
83.9					
82.9	6	109	[illegible]	0.5	
81.9					
80.4					WATER LEVEL +580.9' ½ HR. AFTER BORING
78.9					CLAY-SOME SILT & COAL-DARK GRAY & BLACK-HARD (D)
78.6	7	120	-	0.5	
78.4					

END OF BORING

BORING NO. 59
DATE: 11-15-57
GROUND ELEVATION: +602.7'

+602.7' GROUND SURFACE

E	S	PR	QU	R	CLASSIFICATION
01.7	1	24	-	0.2	SAND & SILT-SOME GRAVEL TRACE OF CLAY-BROWN-FILL-MED.DENSE (M)
00.7					
599.7	2	34	2.5	0.3	
98.7					
97.7	3	36	3.5	0.4	
96.7					SILT & SAND-SOME CLAY-BROWN-DENSE (M)
95.7	4	40	3.5	0.4	
94.7					
93.7					
92.7					
91.7	5	36	3.1	0.3	SILT-SOME CLAY & SAND GRAY-DENSE (M)
90.7					
89.2					
87.7					
86.7	6	97	-	0.4	CLAY-SOME SILT-TRACE OF SAND-DARK GRAY-HARD (D)
85.7					
84.2					
82.7					SILT & SAND-TRACE OF GRAVEL, CLAY-& COAL-DARK GRAY & BLACK-VERY DENSE (D)
82.6	7	132	-	0.2	
82.4					

END OF BORING

NO WATER ENCOUNTERED ½ HR. AFTER BORING

BORING NO. 60
DATE: 11-12-57
GROUND ELEVATION: +606.5'

+606.5' GROUND SURFACE

E	S	PR	QU	R	CLASSIFICATION
06.2					BLACK TOP SOIL-LOOSE (M)
05.5					(M) GRAVEL FILL
05.0	1	13	-	0.5	SILT-SOME SAND-TRACE CLAY-BROWN-MED.DENSE (M)
04.5					
03.5	2	38	-	0.6	SILT-SOME SAND-TRACE OF CLAY-BROWN-DENSE (M)
02.5					
01.5	3	49	-	0.8	FINE SAND-TRACE OF SILT BROWN-DENSE (M)
00.5					
599.5	4	42	-	0.4	SILT-SOME SAND-TRACE CLAY-BROWN & GRAY-DENSE (M)
98.5					
96.5					FINE TO COARSE SAND-TRACE OF SILT & GRAVEL BROWN-DENSE (M)
95.5	5	37	-	0.6	
94.5					
93.0					
91.5					CLAY-SOME SILT-TRACE OF SAND-DARK GRAY-VERY TOUGH (M)
90.5	6	28	3.9	0.4	
89.5					
88.0					
86.5					SILT-SOME CLAY-TRACE OF SAND & GRAVEL-GRAY-VERY DENSE (M)
86.3	7	150	-	0.4	
86.0					WATER LEVEL +586.5' WHILE SAMPLING & ½ HR. AFTER BORING
85.5					
85.0					
84.0	8	8	-	0.2	
83.0					CLAY-SOME SILT & SAND TRACE OF GRAVEL-BROWN & GRAY-TOUGH (M)
81.7					
80.5					
80.0	9	177	-	0.5	
79.5					CLAY-SOME SILT-TRACE OF SAND-DARK GRAY-HARD (D)
76.5					
76.0	10	210	-	0.5	
75.5					

END OF BORING

BORING NO. 61
DATE: 11-16-57
GROUND ELEVATION: +610.4'

+610.4' GROUND SURFACE

E	S	PR	QU	R	CLASSIFICATION
09.4					BLACK TOP SOIL-LOOSE (W)
09.0	1	35	-	0.3	FINE SAND-TRACE OF SILT-BROWN-MED.DENSE (M)
08.4					
07.4	2	52	-	0.4	FINE SAND-SOME SILT-BROWN-DENSE (M)
06.4					
05.4	3	88	3.1	0.3	FINE SAND-SOME SILT GRAY-VERY DENSE (M)
04.4					
03.4	4	64	-	0.3	SILT-SOME SAND-TRACE OF CLAY-GRAY-VERY DENSE (M)
02.4					
01.4					
00.4					
599.4	5	106	-	0.5	FINE TO COARSE SAND-SOME SILT-TRACE OF GRAVEL-BROWN-VERY DENSE (M)
98.4					
96.9					
95.4					
94.4	6	55	-	0.5	
93.4					CLAY-SOME SILT-TRACE OF SAND-DARK GRAY-HARD (D)
90.4					
89.4	7	79	4.0	0.3	
88.4					
85.4					
84.4	8	102	-	0.3	
83.4					

END OF BORING

NO WATER ENCOUNTERED ½ HR. AFTER BORING

BORING NO. 62
DATE: 11-18-57
GROUND ELEVATION: + 612.9'

+612.9' GROUND SURFACE

E	S	PR	QU	R	CLASSIFICATION
11.9	1	52	-	0.7	FINE TO MED. SAND-TRACE OF SILT-BROWN-DENSE (M)
10.9					
09.9	2	64	-	0.6	FINE SAND-SOME SILT-BROWN-VERY DENSE (M)
08.9					
07.9	3	60	-	0.6	
06.9					
05.9	4	72	-	0.5	SILT-SOME SAND-TRACE OF CLAY-BROWN & GRAY-VERY DENSE (M)
04.9					
03.9					
02.9					
01.9	5	114	-	0.7	FINE TO COARSE SAND-SOME SILT-TRACE OF GRAVEL-BROWN-VERY DENSE (M)
00.9					
599.4					
97.9					
96.9	6	53	3.7	0.4	CLAY-SOME SILT-TRACE OF SAND-DARK GRAY-HARD (M)
95.9					
94.4					
92.9					
91.9	7	91	4.1	0.5	CLAY-SOME SILT-TRACE SAND-DARK GRAY-HARD (D)
90.9					
87.9					
87.0	8	130	4.0	0.5	
86.1					

END OF BORING

NO WATER ENCOUNTERED ½ HR. AFTER BORING

GENERAL NOTES

1950 CHICAGO BUILDING CODE SOIL CLASSIFICATIONS ARE USED.

E : ELEVATION
S : SAMPLE NUMBERS
PR : PENETRATION IN BLOWS PER FOOT OF 140 POUNDS HAMMER FALLING 30 INCHES
QU : UNCONFINED COMPRESSIVE STRENGTH-T/SQ.FT.
R : RECOVERY IN FEET
SS : SPLIT SPOON-SIZE: 2" O.D. SIZE: 1 3/8" I.D.
(M): MOIST
(D): DRY
(W): WET

LOGS PREPARED BY

"SOIL TESTING SERVICES, INC.
1827 N. HARLEM AVE.
CHICAGO 35, ILL."

WATER LEVELS INDICATED ON THE BORING LOGS ARE THE LEVELS MEASURED IN THE BORING AT THE TIMES INDICATED. IN PERVIOUS SOILS, THE INDICATED ELEVATIONS ARE CONSIDERED RELIABLE GROUND WATER LEVELS. IN IMPERVIOUS SOILS, THE ACCURATE DETERMINATION OF GROUND WATER ELEVATIONS IS NOT POSSIBLE IN EVEN SEVERAL DAYS OBSERVATION, AND ADDITIONAL EVIDENCE ON GROUND WATER ELEVATIONS MUST BE SOUGHT.

S.T.S. JOB NO. 3791-B

LOCATION NO. 7

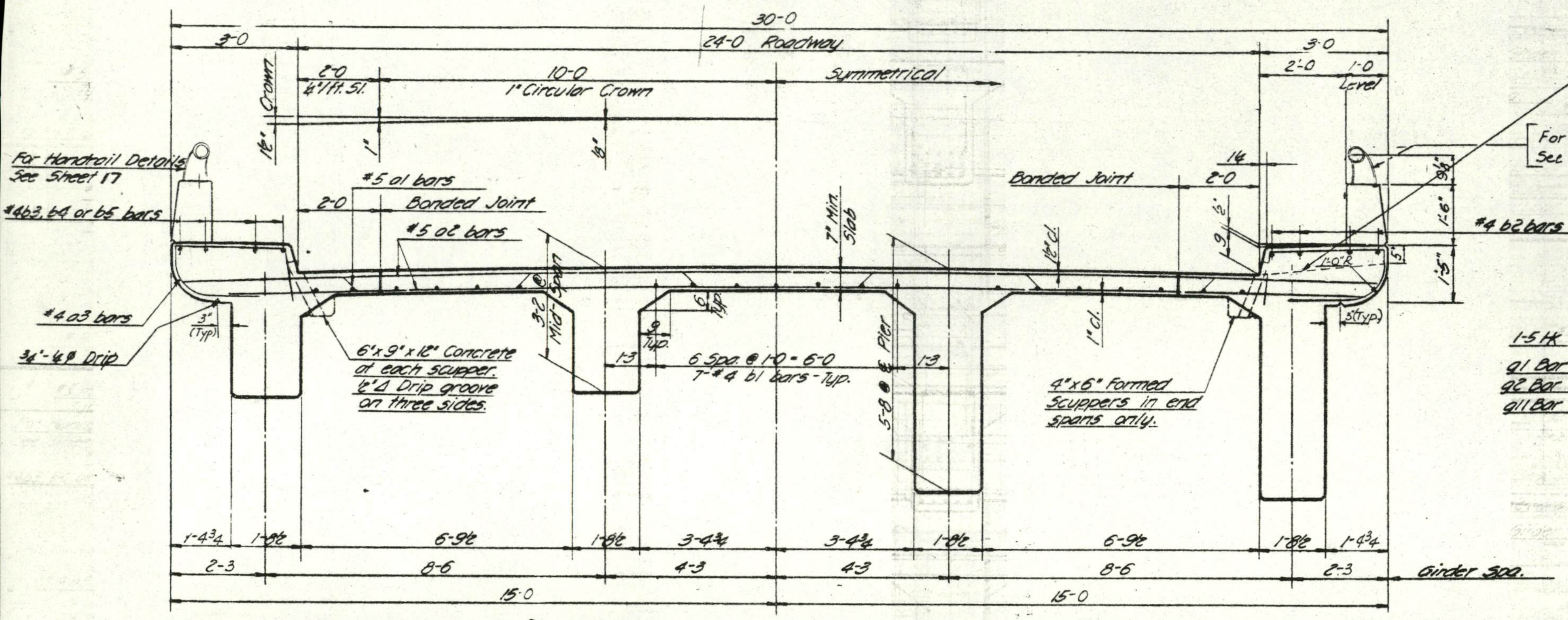
LOCATION NO. 7

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS CHICAGO, ILLINOIS

ILLINOIS DIVISION OF HIGHWAYS
CEMETERY ROAD OVER F.A.I. RT. 74
FAI-74 SECTION 92-12 HB
VERMILION COUNTY STA. 1971 + 24.72

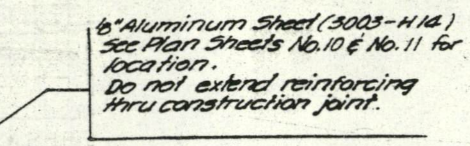
BORING LOGS

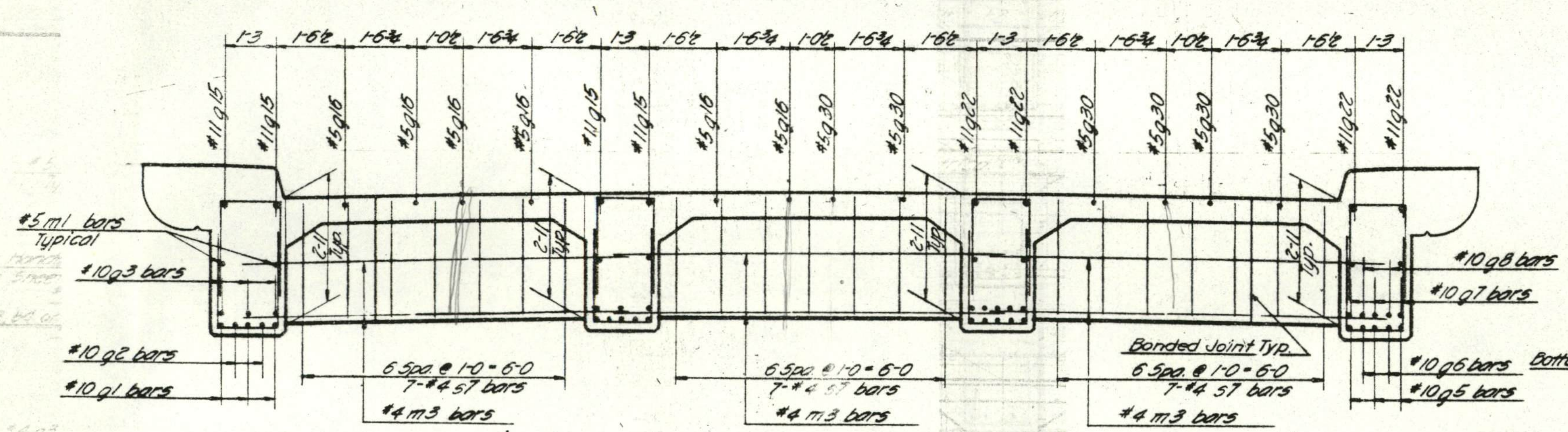
DESIGNED	DRAWN	TRACED	CHECKED	CHECKED	DATE	REVISED
			L.D.B.	HSM	10-13-60 4/9/58	



AT ℄ SPANS AT PIERS

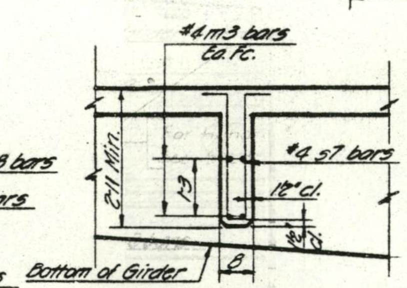
TYPICAL DECK SECTION



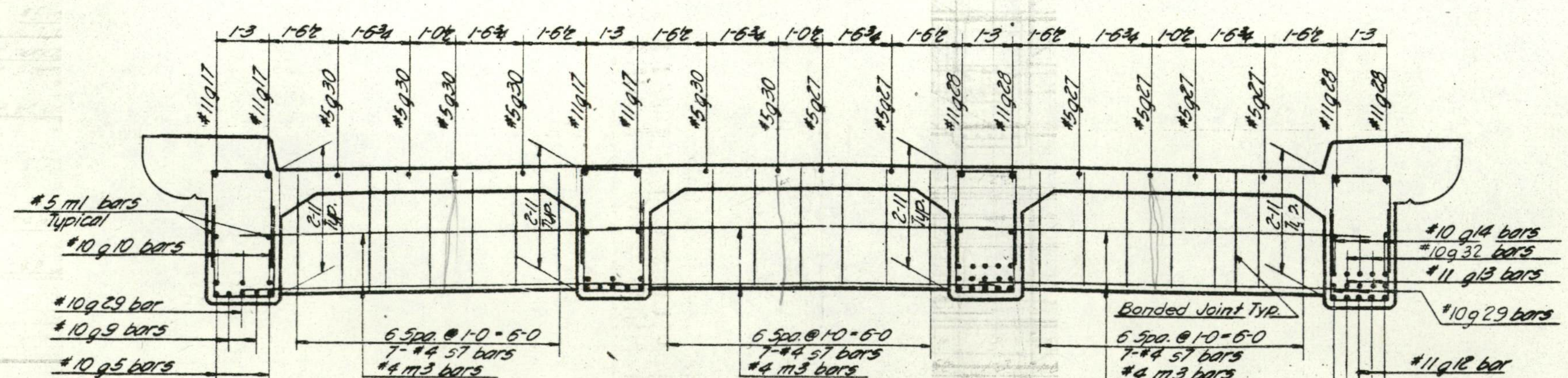


SPAN 1 SPAN 2

SECTION NEAR ℄ SPANS

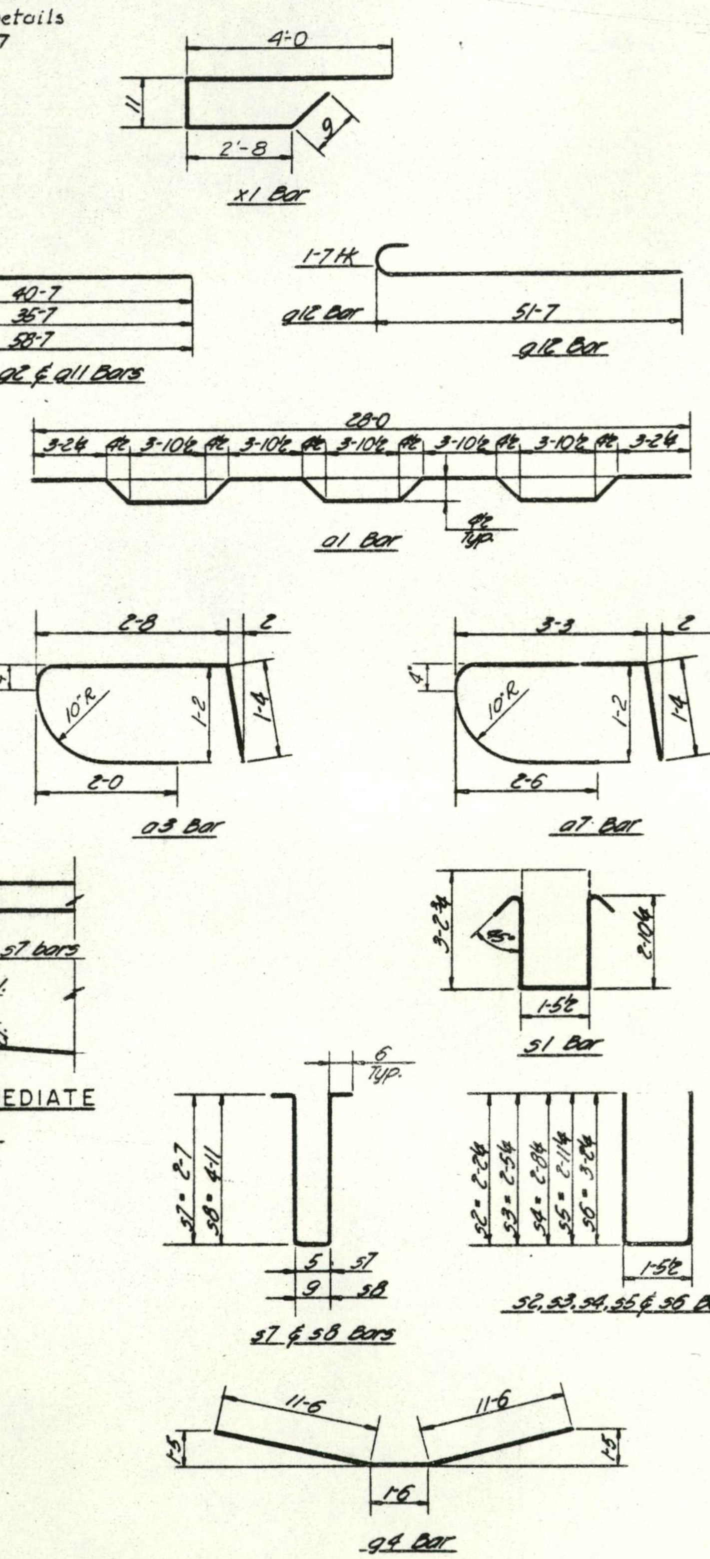


TYPICAL INTERMEDIATE DIAPHRAGM



SPAN 3 SPAN 4

SECTION NEAR ℄ SPANS



BENDING DIAGRAMS
(Bar Dimensions are out to out)

F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	92-12HB	VERMILION	43	8
FEDERAL ROAD DISTRICT NO. 7		ILLINOIS	FED.	

BAR SCHEDULE

Bar	No.	Size	Length	Spacing	Shape
a1	177	5	29-0	1-4	
a2	352	5	28-0	1-4	
a3	384	4	6-10	As Shown	
a4	56	5	30-0	0-8	
a5	10	8	29-4	As Shown	
a6	2	4	29-4	As Shown	
a7	4	4	7-11	As Shown	
b1	189	4	29-5	As Shown	
b2	48	4	11-10	As Shown	
b3	16	4	20-0	As Shown	
b4	32	4	23-0	As Shown	
b5	16	4	29-0	As Shown	
g1	12	10	42-0	As Shown	
g2	8	10	37-0		
g3	12	10	28-0		
g4	40	10	24-6		
g5	20	10	51-0		
g6	8	10	42-0		
g7	12	10	36-0		
g8	8	10	24-0		
g9	8	10	45-0		
g10	12	10	30-0		
g11	16	10	60-0		
g12	4	11	53-2		
g13	8	11	51-7		
g14	12	10	34-6		
g15	8	11	21-0		
g16	12	5	30-2		
g17	84	11	60-0		
g18	24	5	39-0		
g19	12	11	39-0		
g20	32	7	24-0		
g21	30	7	18-0		
g22	8	11	24-0		
g23	12	11	36-0		
g24	12	11	50-0		
g25	16	10	33-0		
g26	15	8	18-0		
g27	24	5	24-9		
g28	8	11	46-0	As Shown	
g29	16	10	43-0	As Shown	
g30	24	5	35-6	As Shown	
g31	12	5	36-0	As Shown	
m1	56	5	37-7	As Shown	
m2	24	5	38-0	As Shown	
m3	84	4	8-10	1-3	
m4	54	4	11-0	1-6	
s1	168	4	7-11	As Shown	
s2	528	4	5-10		
s3	200	4	6-4		
s4	144	4	6-10		
s5	104	4	7-4		
s6	104	4	7-10	As Shown	
s7	147	4	6-7	1-0	
s8	63	4	11-7	1-0	
g32	8	10	24-9	As Shown	
x1	120	5	8-4	6	

SUPERSTRUCTURE QUANTITIES

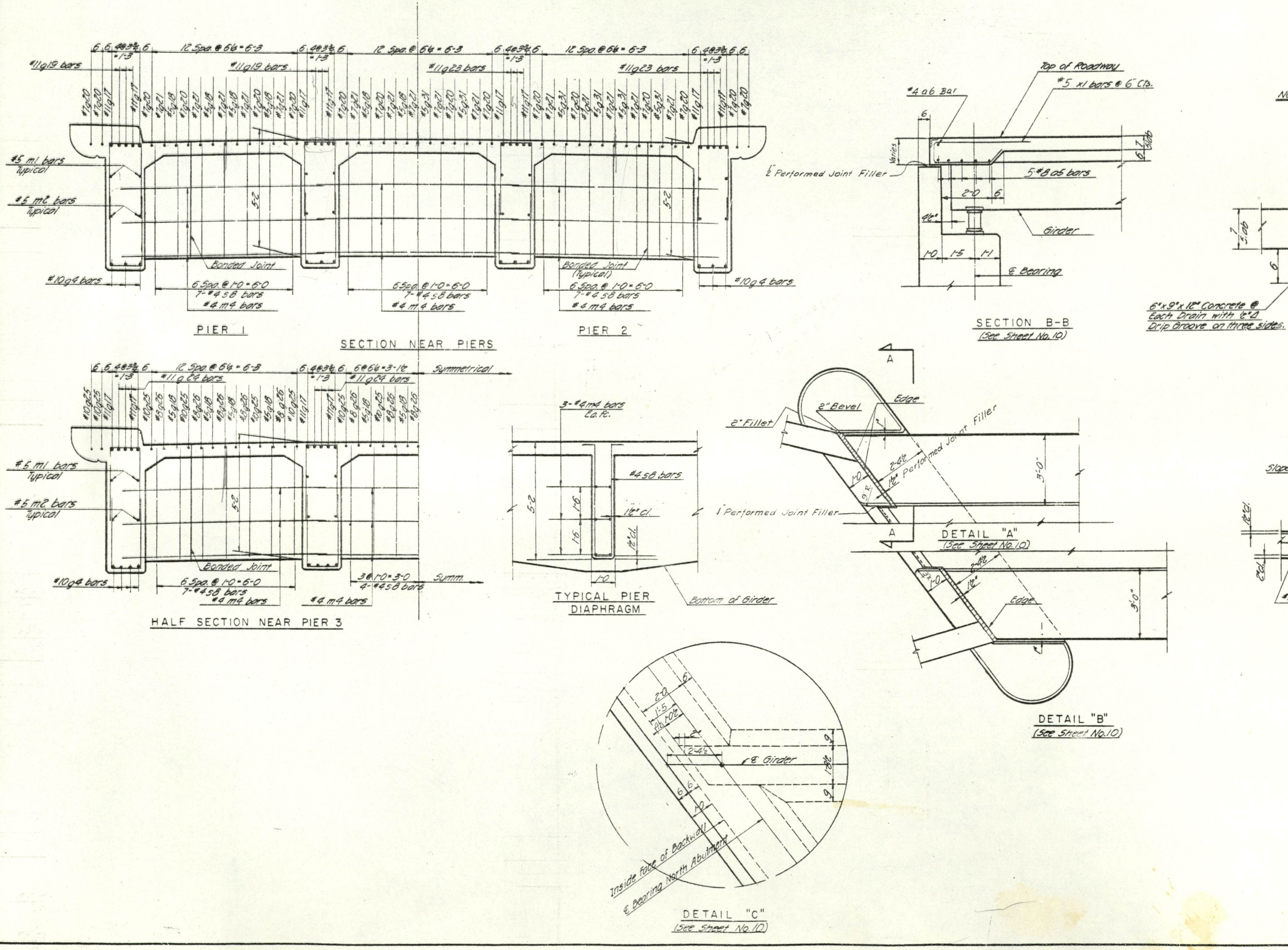
Class X Concrete	454.7	Cu. Yds.
Reinforcement Bars	99,080	Lbs.

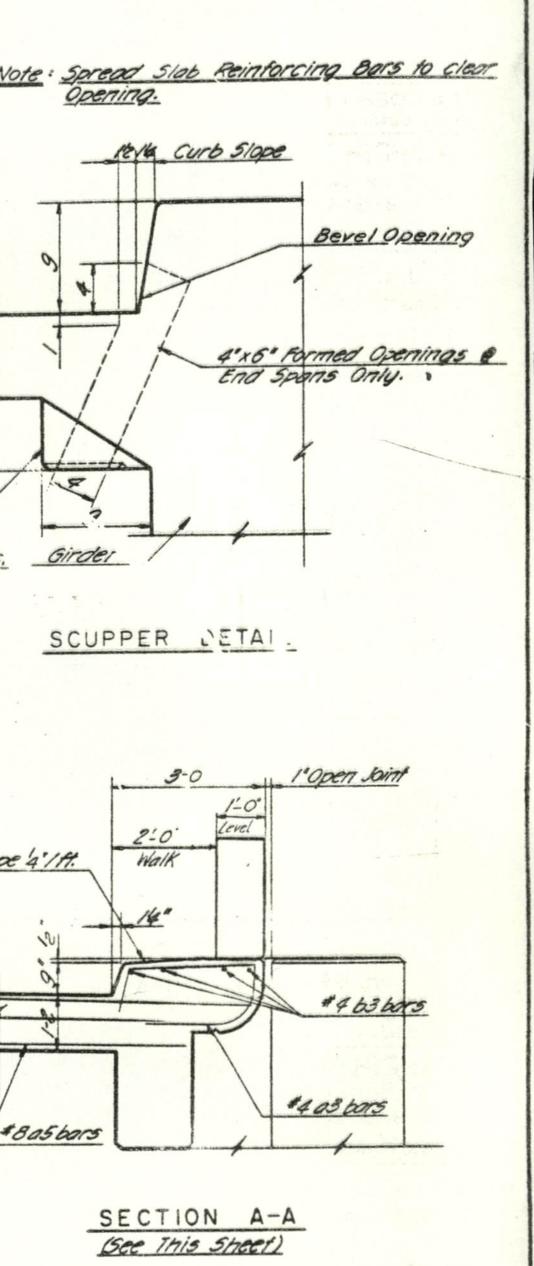
CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS CHICAGO, ILLINOIS

ILLINOIS DIVISION OF HIGHWAYS
CEMETERY ROAD OVER FAI RT. 74
FAI-74 SECTION 92-12HB
VERMILION COUNTY STA. 1971+24.72

SUPERSTRUCTURE DETAILS

DESIGNED	DRAWN	TRACED	CHECKED		
AEK	DS	DS	JWH		
			LDB	HSM	10-13-60





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CONSULTING ENGINEERS — CHICAGO, ILLINOIS

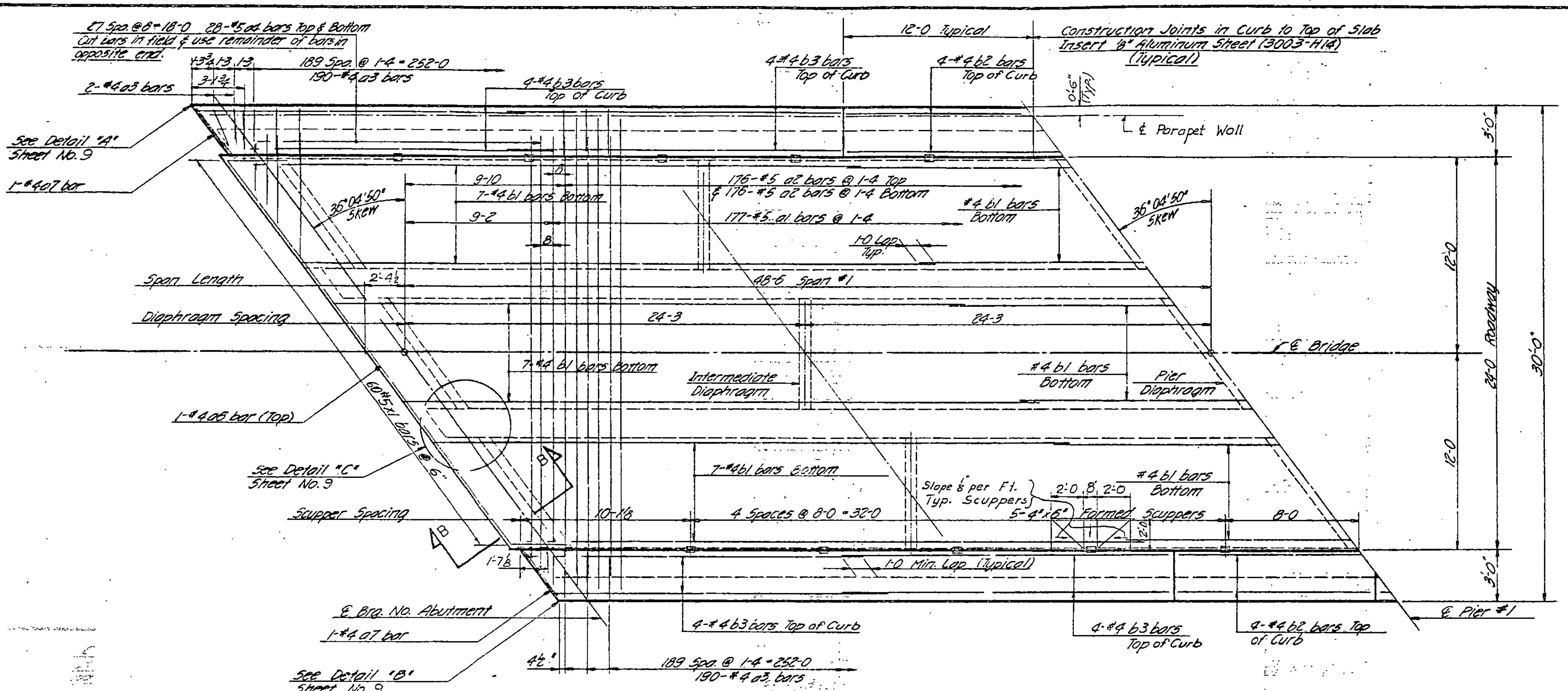
ILLINOIS DIVISION OF HIGHWAYS
CEMETERY ROAD OVER FAI RT. 74
FAI-74 SECTION 92-12HB

VERMILION COUNTY — STA. 1971+24.72

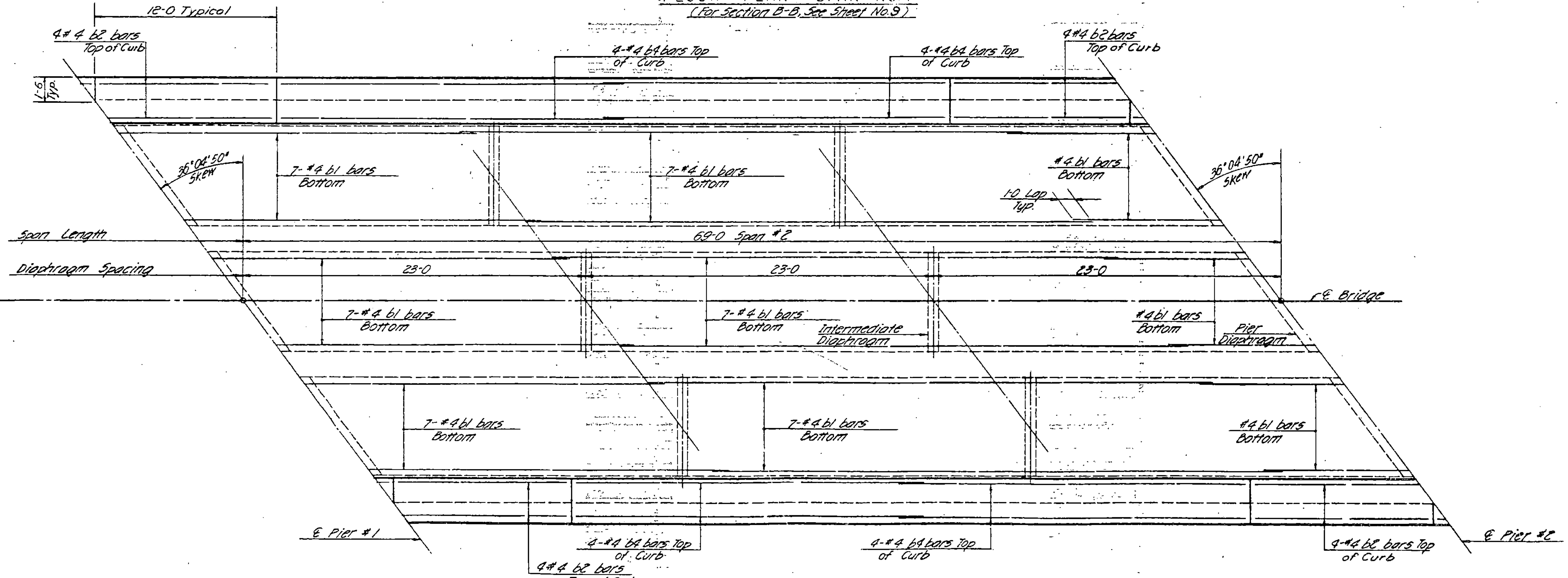
SUPERSTRUCTURE DETAILS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
AEK	DS	DS	JWH LDB	HSM	10-13-60	

F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	92-12HB	VERMILION	43	10
FEDERAL ROAD DISTRICT NO. 7		ILLINOIS	PROJ.	



FLOOR PLAN — SPAN NO. 1
(For Section B-B, See Sheet No. 9)



FLOOR PLAN — SPAN NO. 2

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS — CHICAGO, ILLINOIS

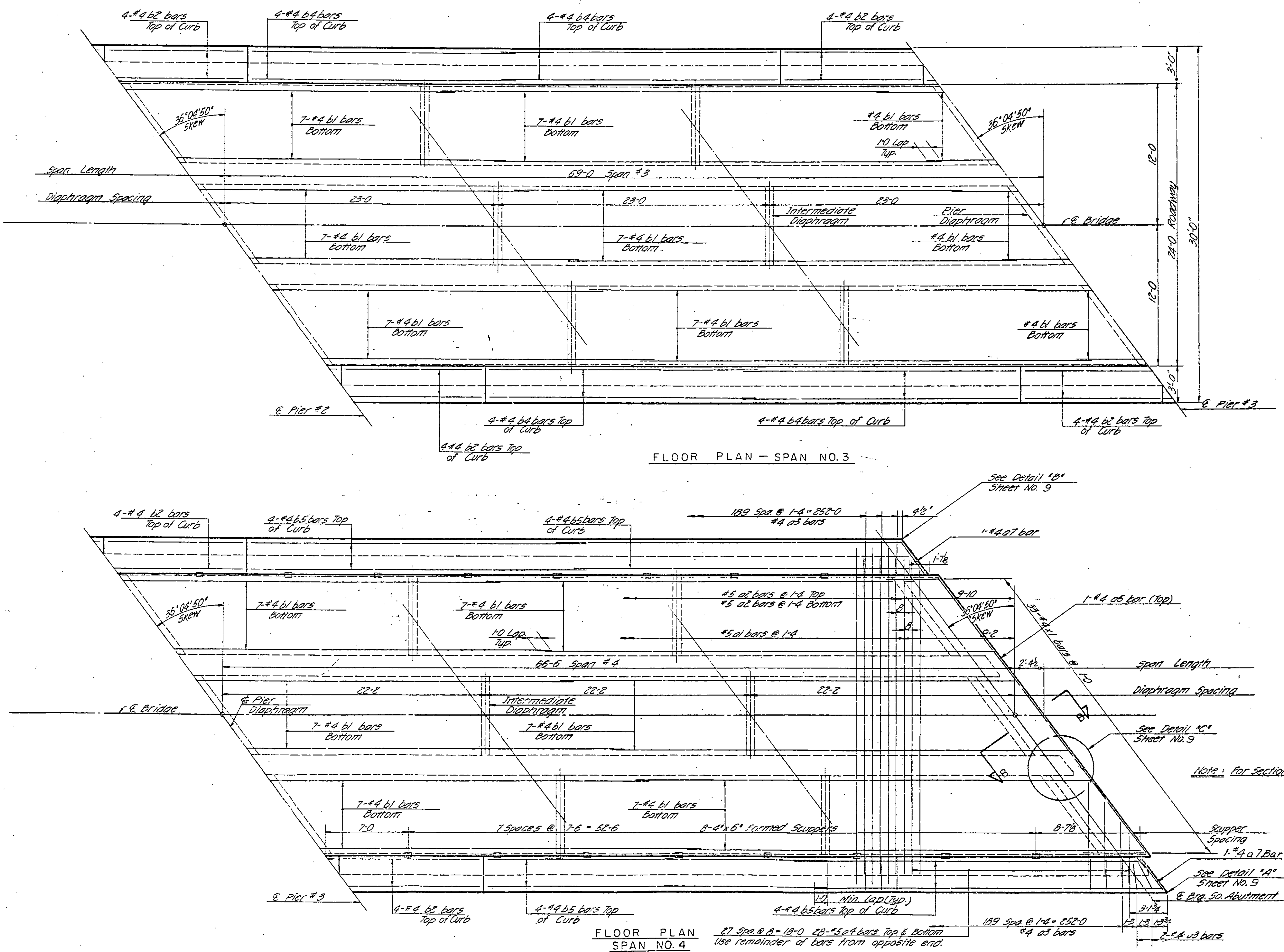
ILLINOIS DIVISION OF HIGHWAYS
CEMETERY ROAD OVER FAI RT. 74
FAI-74 SECTION 92-12HB
VERMILION COUNTY — STA. 1971+24.72

SUPERSTRUCTURE DETAILS

DESIGNED	DRAWN	TRACED	CHECKED	DESIGNED	DATE	REVISED
AEK	DS	DS	JWH			
			LDB	HSM	10-13-60	

F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL	SHEET NO.
74	92-12HB	VERMILION	43	11

FEDERAL ROAD DISTRICT NO. 7 | ILLINOIS



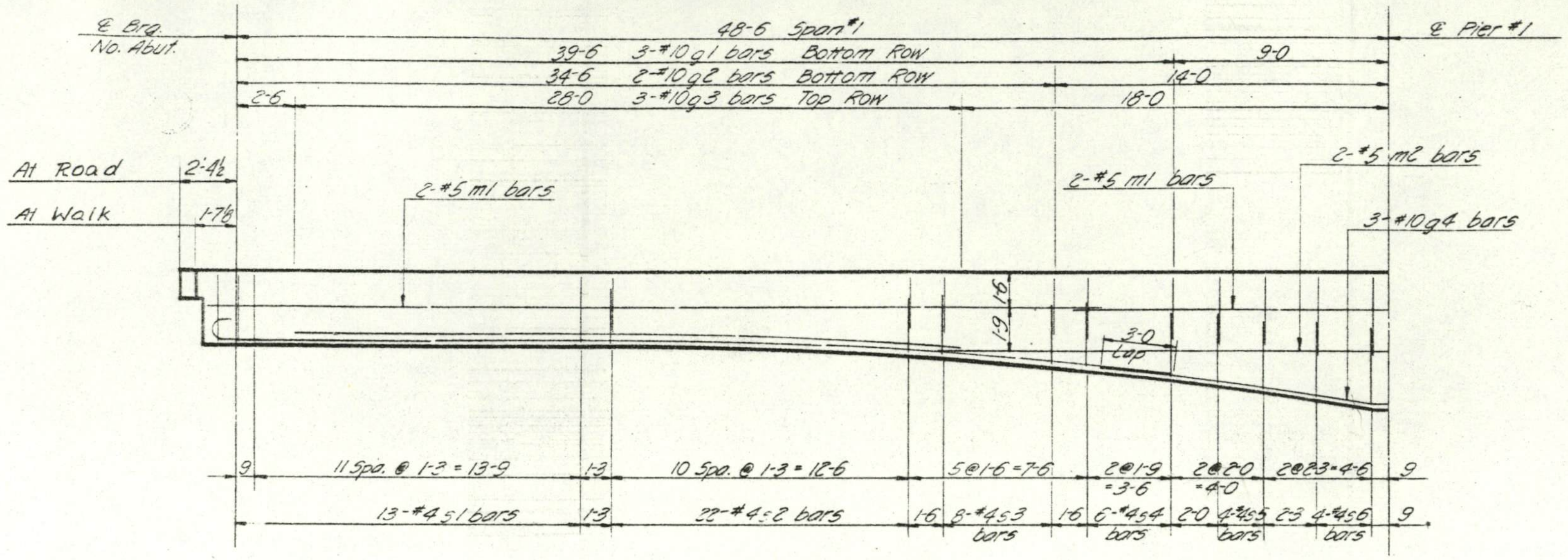
CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS — CHICAGO, ILLINOIS

ILLINOIS DIVISION OF HIGHWAYS
CEMETERY ROAD OVER FAI RT. 74
FAI-74 SECTION 92-12HB
VERMILION COUNTY — STA. 1971+24.72

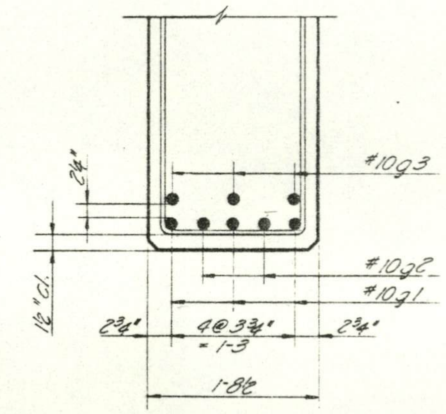
SUPERSTRUCTURE DETAILS

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISED
AEK	DS	DS	JWH			
			LDB	HSM	10-13-60	

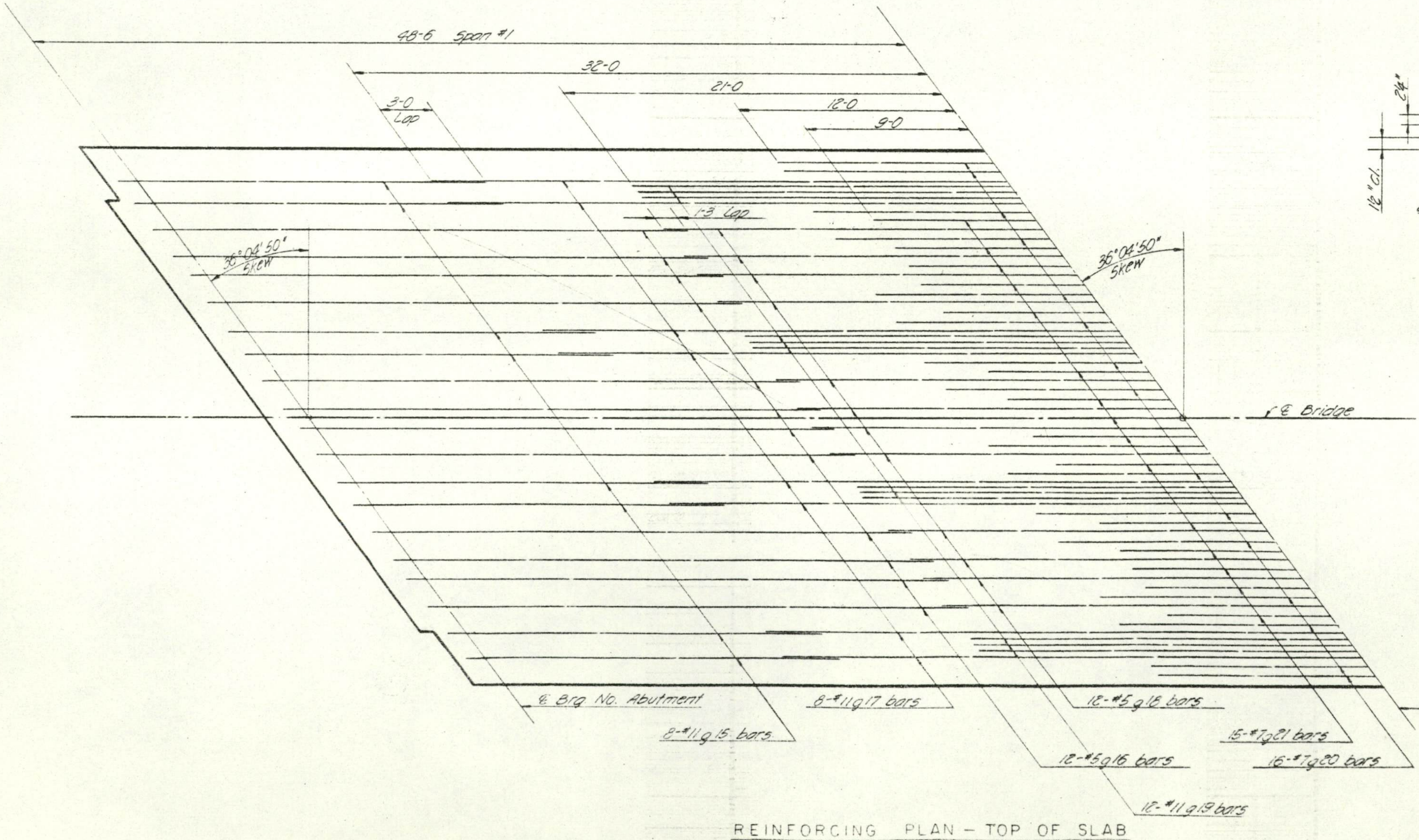
F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	92-12HB	VERMILION	43	12
FEDERAL ROAD DISTRICT NO. 7		ILLINOIS	PROJ.	



GIRDER ELEVATION



GIRDER SECTION
SPAN NO. 1



REINFORCING PLAN - TOP OF SLAB
SPAN NO. 1

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS CHICAGO, ILLINOIS

ILLINOIS DIVISION OF HIGHWAYS

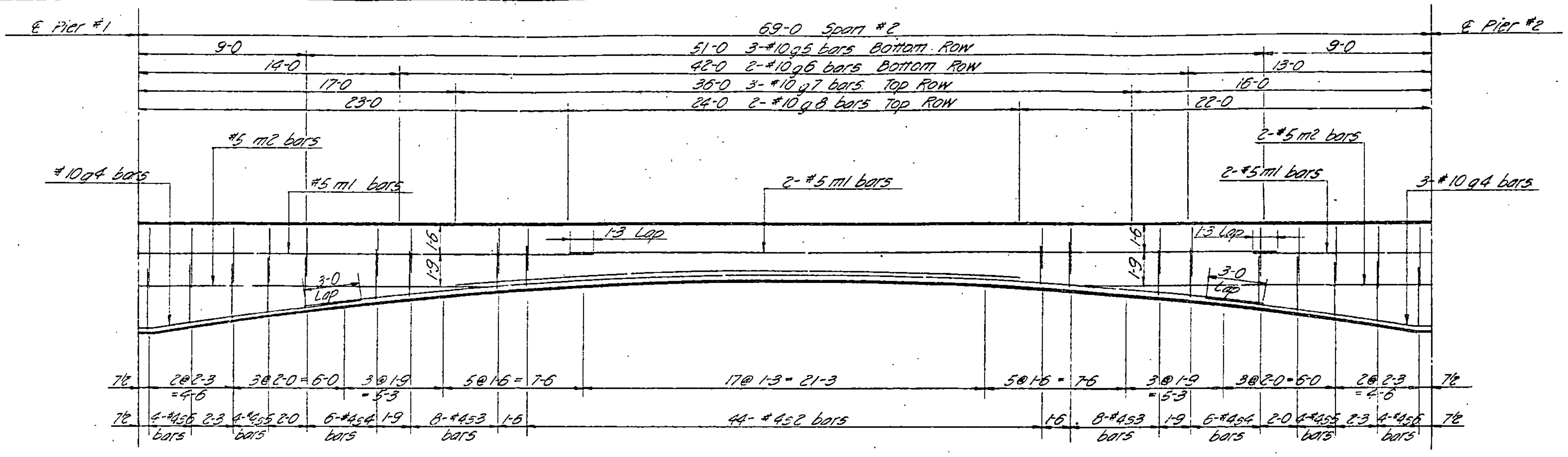
CEMETERY ROAD OVER FAI RT. 74
FAI-74 SECTION 92-12HB

VERMILION COUNTY STA. 1971+24.72

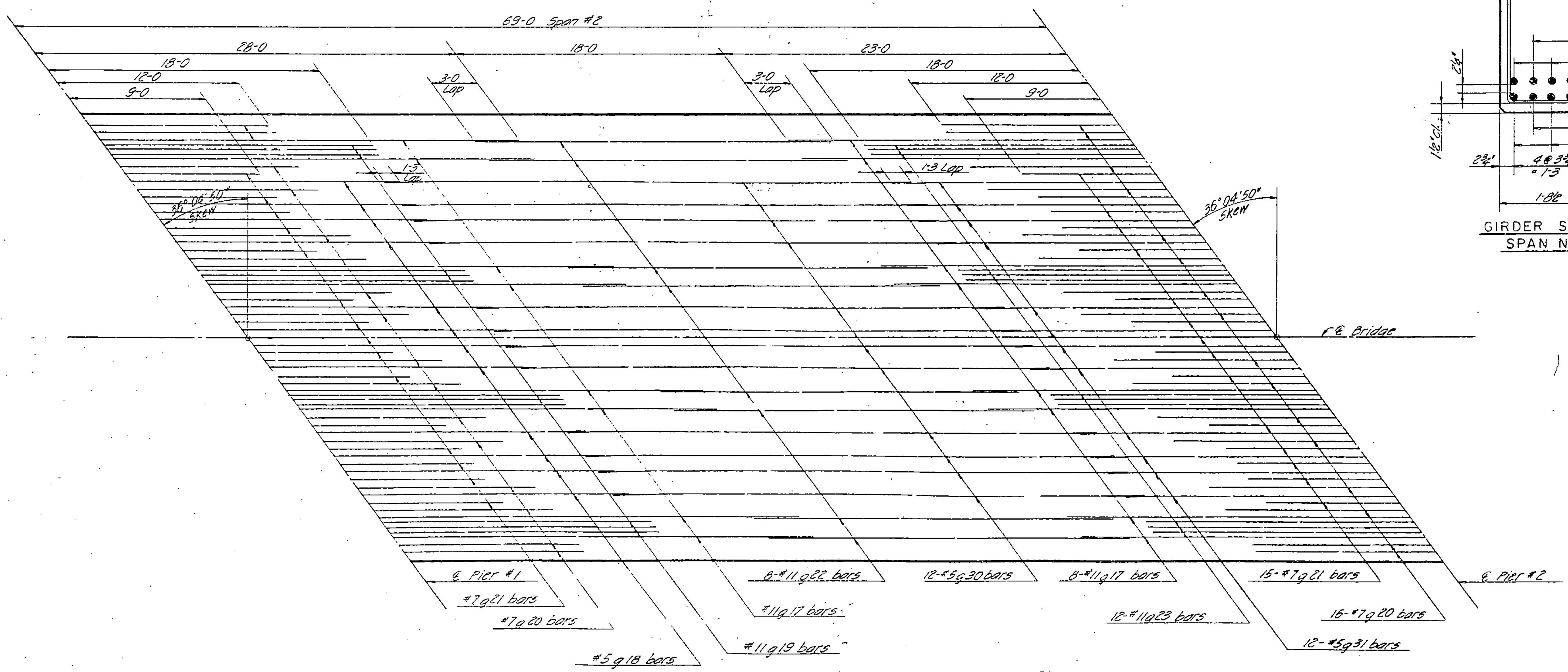
SUPERSTRUCTURE DETAILS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
AEK	DS	DS	JWH			
			LDB	HSM	10-13-60	

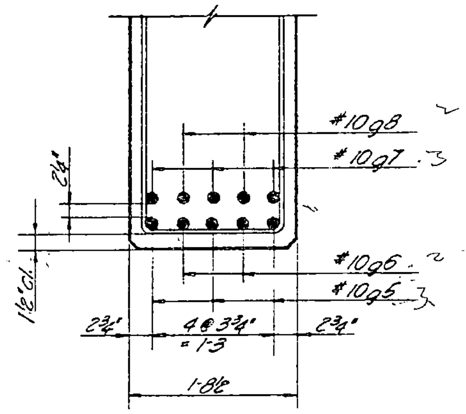
F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	92-12HB	VERMILION	43	13
FEDERAL ROAD DISTRICT NO. 7		ILLINOIS	PROJ.	



GIRDER ELEVATION



REINFORCING PLAN – TOP OF SLAB
SPAN NO. 2



GIRDER SECTION
SPAN NO. 2

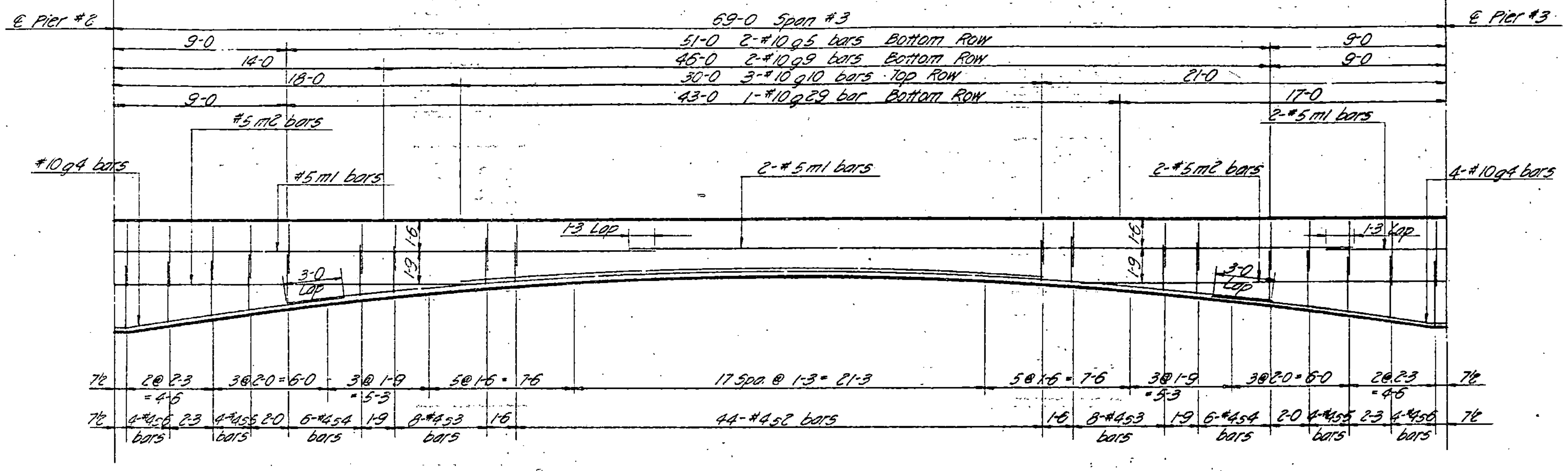
CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS CHICAGO, ILLINOIS

ILLINOIS DIVISION OF HIGHWAYS
CEMETERY ROAD OVER FAI RT. 74
FAI-74 SECTION 92-12HB
VERMILION COUNTY STA. 1971+24.72

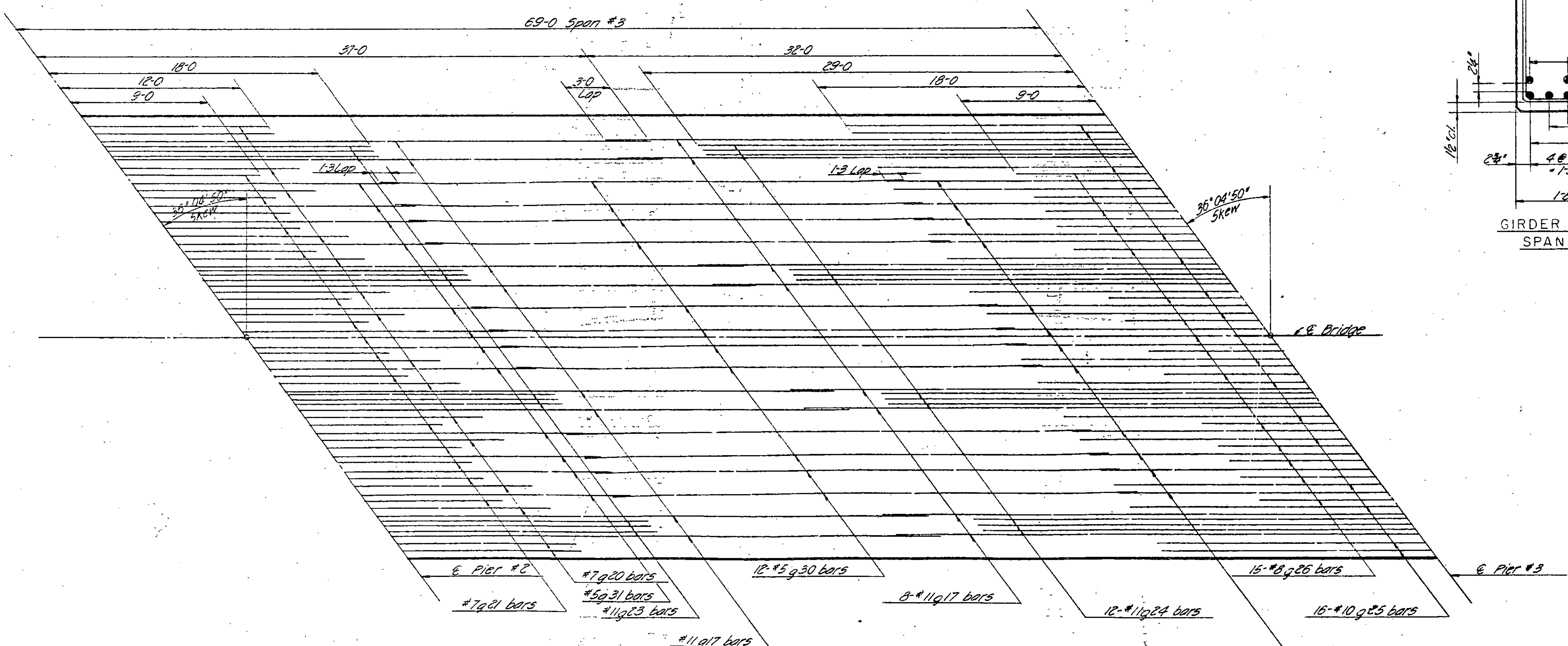
SUPERSTRUCTURE DETAILS

DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE	REVISED
AEK	DS	DS	JWH / LDB	HSM	10-13-60	

F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	92-12HB	VERMILION	43	14
FEDERAL ROAD DISTRICT NO. 7	ILLINOIS	PROJ.		

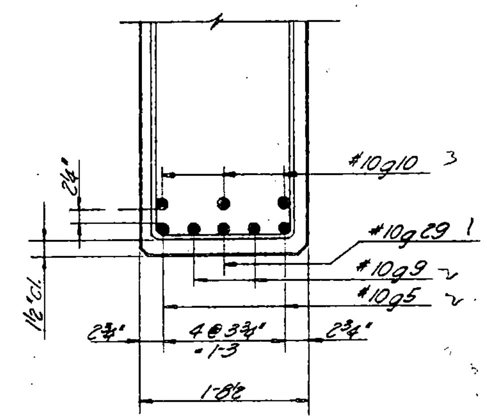


GIRDER ELEVATION



REINFORCING PLAN — TOP OF SLAB

SPAN NO. 3



GIRDER SECTION

SPAN NO. 3

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS — CHICAGO, ILLINOIS

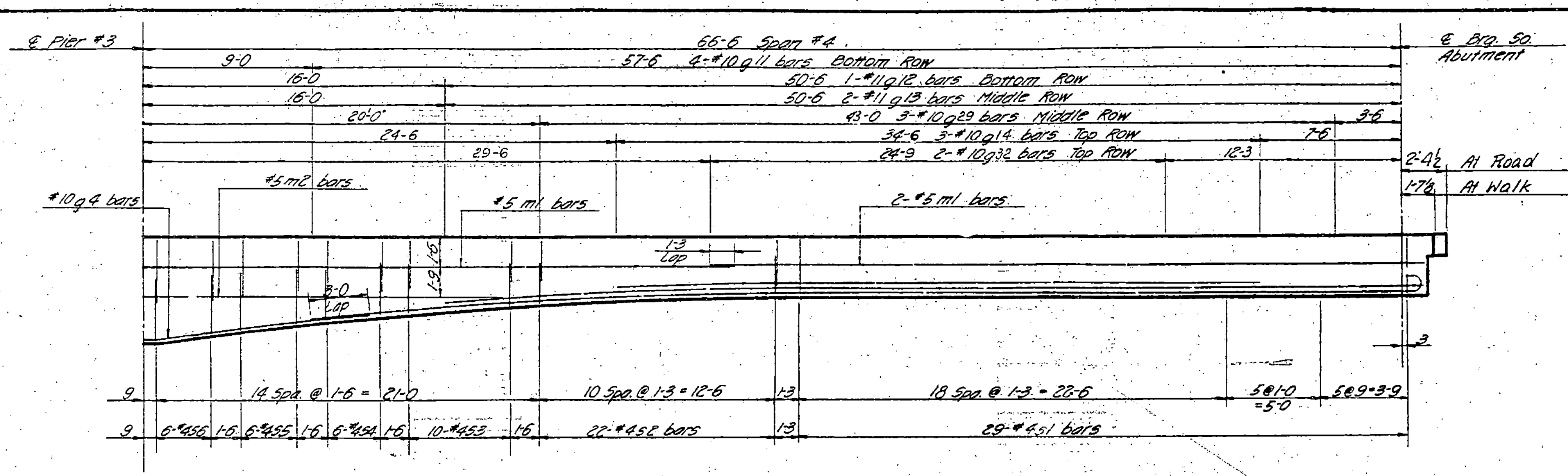
ILLINOIS DIVISION OF HIGHWAYS

CEMETERY ROAD OVER FAI RT. 74
FAI-74 SECTION 92-12HB
VERMILION COUNTY — STA. 1971+24.72

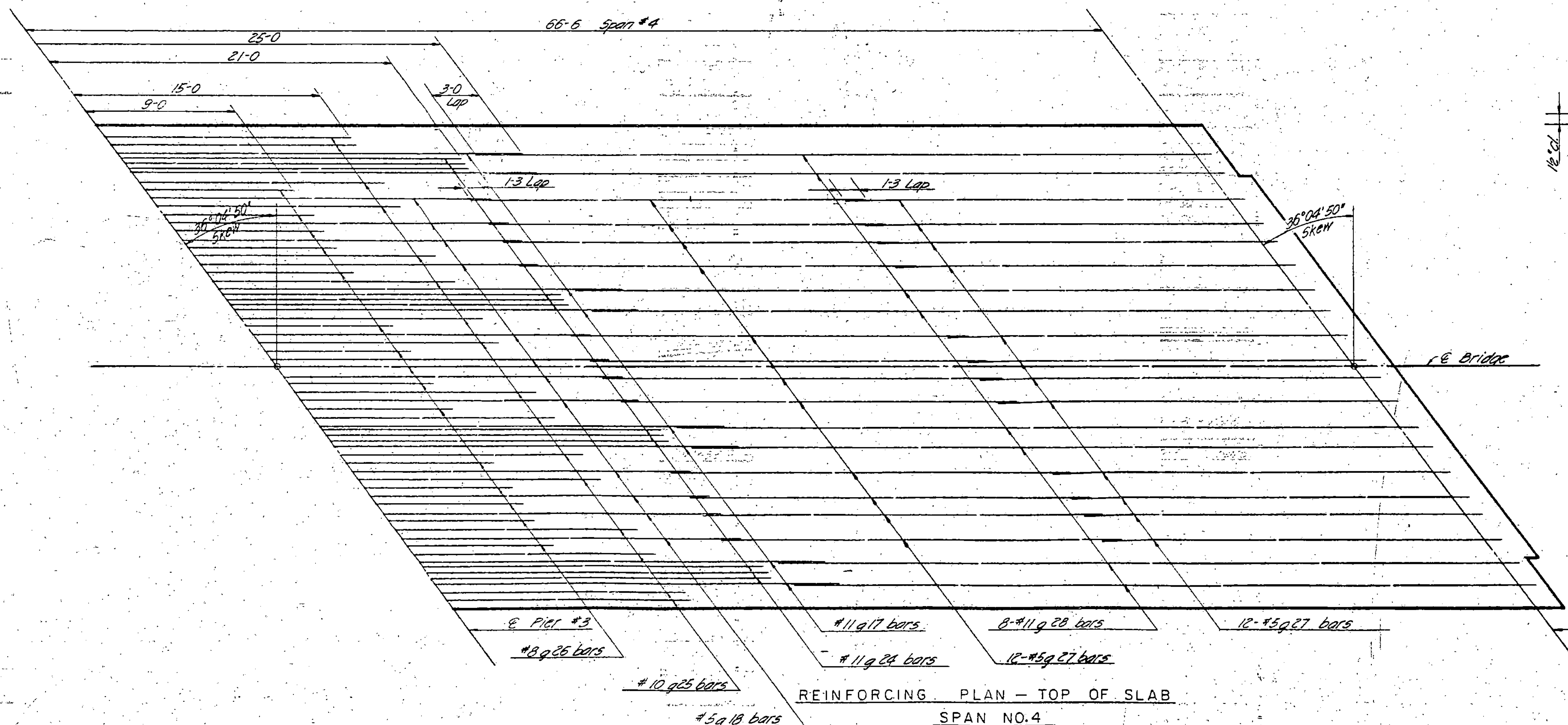
SUPERSTRUCTURE DETAILS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
AEK	DS	DS	JWH LDB	HSM	10-13-60	

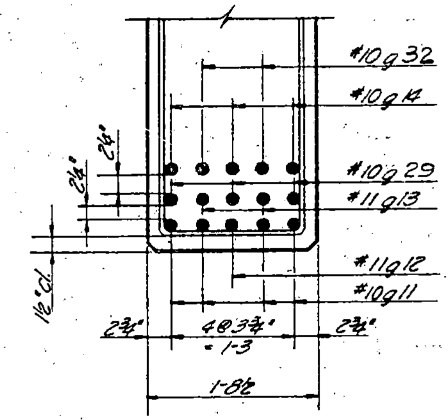
F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	92-12HB	VERMILION	43	15
FEDERAL ROAD DISTRICT NO. 7		ILLINOIS	PROJ.	



GIRDER ELEVATION



REINFORCING PLAN – TOP OF SLAB
SPAN NO.4



GIRDER SECTION
SPAN NO.4

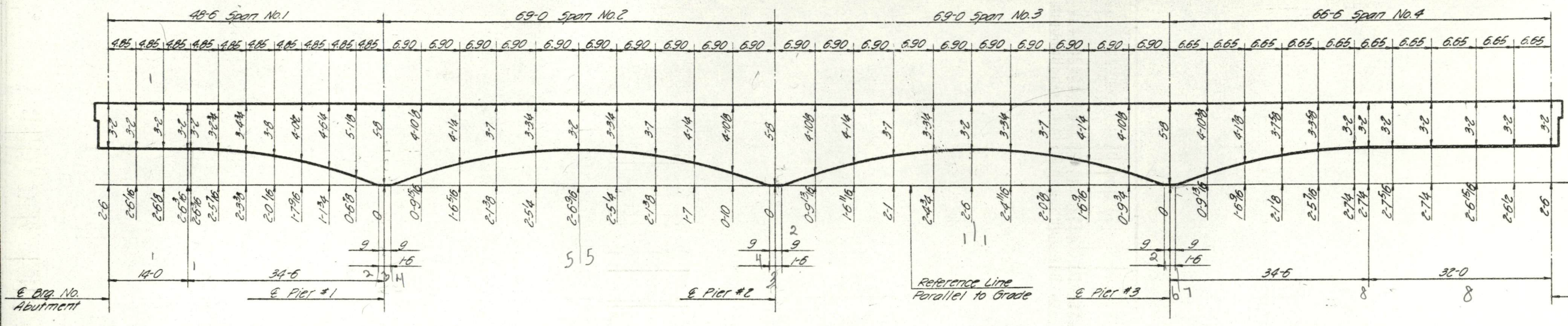
CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS CHICAGO, ILLINOIS

ILLINOIS DIVISION OF HIGHWAYS
CEMETERY ROAD OVER FAI RT. 74
FAI-74 SECTION 92-12HB
VERMILION COUNTY STA. 1971+24.72

SUPERSTRUCTURE DETAILS

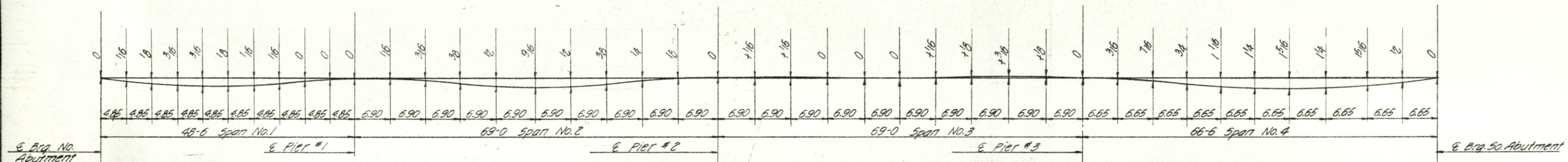
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
AEK	DS	DS	JWH LDB	HSM	10-13-60	

F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	92-12HB	VERMILION	43	16
FEDERAL ROAD DISTRICT NO. 7	ILLINOIS	PROJ.		



Girder Ordinates (All Girders)
Ordinates include Dead Load Deflection. Contractor shall allow for Settlement of Forms and Shrinkage.

GIRDER ELEVATION
(No Scale)



Note: Deflections shown are in inches.

DEAD LOAD DEFLECTIONS

SPAN 1

1/10 POINT	LINE NO.	STATION	ELEVATION THEOR.	ELEVATION ADJUSTED
℄ Brg. No. Abut.	1	4891.790	614.358	614.358
	2	4885.596	614.206	614.206
	3	4882.500	614.085	614.085
	4	4879.403	613.941	613.941
	5	4873.209	613.558	613.558
2.	1	4901.490	614.767	614.777
	2	4895.296	614.621	614.631
	3	4892.200	614.500	614.510
	4	4889.103	614.358	614.368
	5	4882.909	613.978	613.988
4.	1	4911.190	615.171	615.187
	2	4904.996	615.028	615.044
	3	4901.900	614.909	614.925
	4	4898.803	614.769	614.785
	5	4892.609	614.392	614.408
6.	1	4920.890	615.569	615.574
	2	4914.696	615.430	615.435
	3	4911.600	615.313	615.318
	4	4908.503	615.174	615.179
	5	4902.309	614.801	614.806
8.	1	4930.590	615.961	615.961
	2	4924.396	615.826	615.826
	3	4921.300	615.710	615.710
	4	4918.203	615.574	615.574
	5	4912.009	615.205	615.205
℄ Brg. Pier #1	1	4940.290	616.348	616.348
	2	4934.096	616.216	616.216
	3	4931.000	616.103	616.103
	4	4927.903	615.968	615.968
	5	4921.709	615.602	615.602

SPAN 2

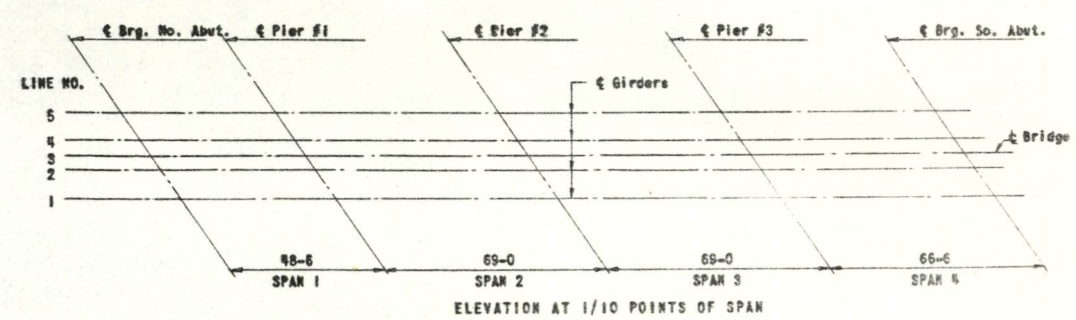
1/10 POINT	LINE NO.	STATION	ELEVATION THEOR.	ELEVATION ADJUSTED
	1	4947.190	616.620	616.625
	2	4940.996	616.491	616.496
1.	3	4937.900	616.378	616.383
	4	4934.803	616.244	616.249
	5	4928.609	615.882	615.887
	1	4954.090	616.889	616.905
	2	4947.896	616.762	616.778
2.	3	4944.800	616.651	616.667
	4	4941.703	616.518	616.534
	5	4935.509	616.158	616.174
	1	4960.990	617.155	617.186
	2	4954.796	617.030	617.061
3.	3	4951.700	616.921	616.952
	4	4948.603	616.790	616.821
	5	4942.409	616.432	616.463
	1	4967.890	617.418	617.460
	2	4961.696	617.296	617.338
4.	3	4958.600	617.188	617.230
	4	4955.503	617.058	617.100
	5	4949.309	616.703	616.745
	1	4974.790	617.678	617.725
	2	4968.596	617.559	617.606
5.	3	4965.500	617.452	617.499
	4	4962.403	617.323	617.370
	5	4956.209	616.971	617.018
	1	4981.690	617.935	617.977
	2	4975.496	617.819	617.861
6.	3	4972.400	617.713	617.755
	4	4969.303	617.586	617.628
	5	4963.109	617.236	617.278
	1	4988.590	618.190	618.221
	2	4982.396	618.076	618.107
7.	3	4979.300	617.971	618.002
	4	4976.203	617.845	617.876
	5	4970.009	617.498	617.529
	1	4995.490	618.442	618.463
	2	4989.296	618.330	618.351
8.	3	4986.200	618.227	618.248
	4	4983.103	618.102	618.123
	5	4976.909	617.757	617.778
	1	5002.390	618.690	618.700
	2	4996.196	618.582	618.592
9.	3	4993.100	618.480	618.490
	4	4990.003	618.356	618.366
	5	4983.809	618.014	618.024
℄ Brg. Pier #2	1	5009.290	618.936	618.936
	2	5003.096	618.830	618.830
	3	5000.000	618.730	618.730
	4	4996.903	618.607	618.607
	5	4990.709	618.267	618.267

SPAN 3

1/10 POINT	LINE NO.	STATION	ELEVATION THEOR.	ELEVATION ADJUSTED
	1	5016.190	619.180	619.175
	2	5009.996	619.076	619.071
1.	3	5006.900	618.976	618.971
	4	5003.803	618.856	618.851
	5	4997.609	618.518	618.513
	1	5023.090	619.420	619.415
	2	5016.896	619.319	619.314
2.	3	5013.800	619.221	619.216
	4	5010.703	619.101	619.096
	5	5004.509	618.766	618.761
	1	5029.990	619.657	619.657
	2	5023.796	619.559	619.559
3.	3	5020.700	619.462	619.462
	4	5017.603	619.344	619.344
	5	5011.409	619.011	619.011
	1	5036.890	619.892	619.892
	2	5030.696	619.796	619.796
4.	3	5027.600	619.700	619.700
	4	5024.503	619.583	619.583
	5	5018.309	619.254	619.254
	1	5043.790	620.123	620.123
	2	5037.596	620.030	620.030
5.	3	5034.500	619.936	619.936
	4	5031.403	619.820	619.820
	5	5025.209	619.493	619.493
	1	5050.690	620.352	620.347
	2	5044.496	620.262	620.257
6.	3	5041.400	620.168	620.163
	4	5038.303	620.054	620.049
	5	5032.109	619.730	619.725
	1	5057.590	620.578	620.568
	2	5051.396	620.490	620.480
7.	3	5048.300	620.398	620.388
	4	5045.203	620.285	620.275
	5	5039.009	619.963	619.953
	1	5064.490	620.801	620.785
	2	5058.296	620.716	620.700
8.	3	5055.200	620.625	620.609
	4	5052.103	620.513	620.497
	5	5045.909	620.194	620.178
	1	5071.390	621.022	621.012
	2	5065.196	620.939	620.929
9.	3	5062.100	620.849	620.839
	4	5059.003	620.739	620.729
	5	5052.809	620.422	620.412
℄ Brg. Pier #3	1	5078.290	621.239	621.239
	2	5072.096	621.159	621.159
	3	5068.000	621.071	621.071
	4	5065.903	620.961	620.961
	5	5059.709	620.647	620.647

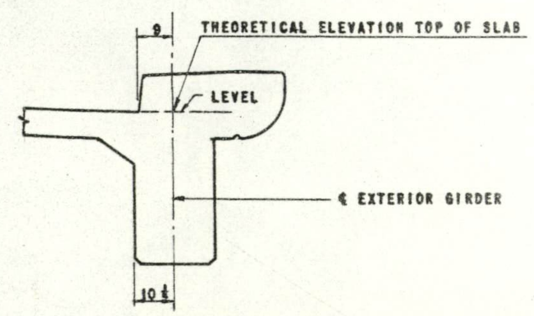
SPAN 4

1/10 POINT	LINE NO.	STATION	ELEVATION THEOR.	ELEVATION ADJUSTED
	1	5084.940	621.446	621.462
	2	5078.746	621.368	621.384
1.	3	5075.650	621.281	621.297
	4	5072.553	621.173	621.189
	5	5066.359	620.861	620.877
	1	5091.590	621.650	621.686
	2	5085.396	621.575	621.611
2.	3	5082.300	621.489	621.525
	4	5079.203	621.382	621.418
	5	5073.009	621.073	621.109
	1	5098.240	621.852	621.914
	2	5092.046	621.779	621.841
3.	3	5088.950	621.694	621.756
	4	5085.853	621.589	621.651
	5	5079.659	621.282	621.344
	1	5104.890	622.051	622.139
	2	5098.696	621.980	622.068
4.	3	5095.600	621.897	621.985
	4	5092.503	621.793	621.881
	5	5086.309	621.488	621.576
	1	5111.540	622.247	622.351
	2	5105.346	622.179	622.283
5.	3	5102.250	622.097	622.201
	4	5099.153	621.994	622.098
	5	5092.959	621.692	622.796
	1	5118.190	622.440	622.549
	2	5111.996	622.375	622.484
6.	3	5108.900	622.294	622.403
	4	5105.803	622.192	622.301
	5	5099.609	621.893	622.002
	1	5124.840	622.631	622.735
	2	5118.646	622.568	622.672
7.	3	5115.550	622.489	622.593
	4	5112.453	622.388	622.492
	5	5106.259	622.091	622.195
	1	5131.490	622.819	622.897
	2	5125.296	622.759	622.837
8.	3	5122.200	622.681	622.759
	4	5119.103	622.581	622.659
	5	5112.909	622.287	622.365
	1	5138.140	623.005	623.047
	2	5131.946	622.947	622.989
9.	3	5128.850	622.870	622.912
	4	5125.753	622.772	622.814
	5	5119.559	622.480	622.522
℄ Brg. So. Abut.	1	5144.790	623.188	623.188
	2	5138.596	623.132	623.132
	3	5135.500	623.057	623.057
	4	5132.403	622.960	622.960
	5	5126.209	622.670	622.670



ELEVATION AT 1/10 POINTS OF SPAN

PLAN



SECTION EXTERIOR GIRDER

NOTES:

1. THEORETICAL ELEVATION IS THE THEORETICAL TOP OF SLAB ELEVATION.
2. ADJUSTED ELEVATION IS THE THEORETICAL TOP OF SLAB ELEVATION ADJUSTED FOR THE CONCRETE DEAD LOAD DEFLECTION.

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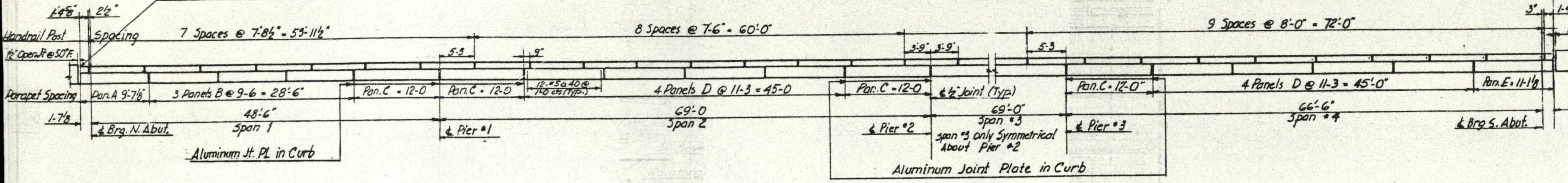
ILLINOIS DIVISION OF HIGHWAYS
CEMETERY ROAD OVER FAI RT. 74
FAI-74 SECTION 92-12HB
VERMILION COUNTY STA. 1971+24.72

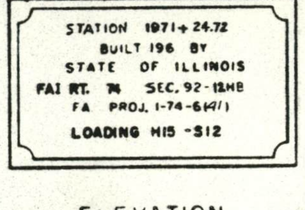
SUPERSTRUCTURE DETAILS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
AEK	DS	DS	JWH LDB	HSM	10-13-60	

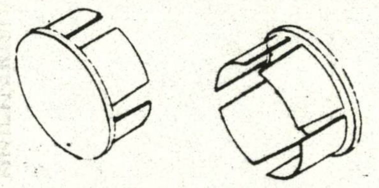
F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	92-12HB	VERMILION	43	17
FEDERAL ROAD DISTRICT NO. 7		ILLINOIS	PROJ.	



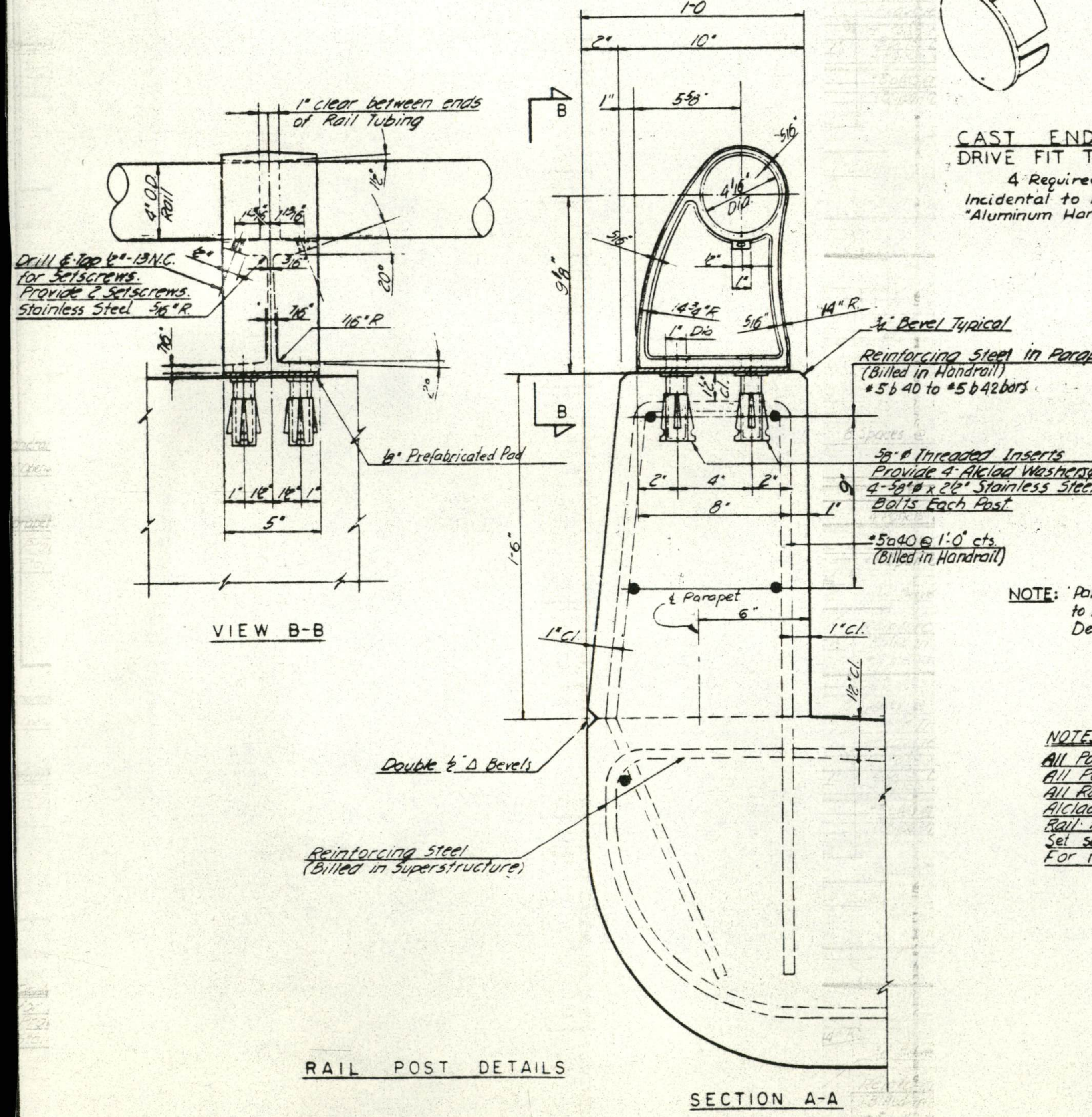
HANDRAIL ELEVATION



ELEVATION
BRIDGE NAME PLATE
(Provide 2)

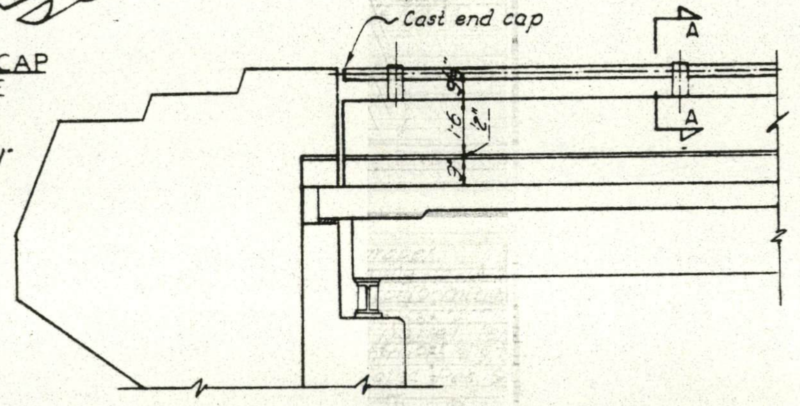


CAST END CAP
DRIVE FIT TYPE
4 Required
Incidental to Item "Aluminum Handrail"

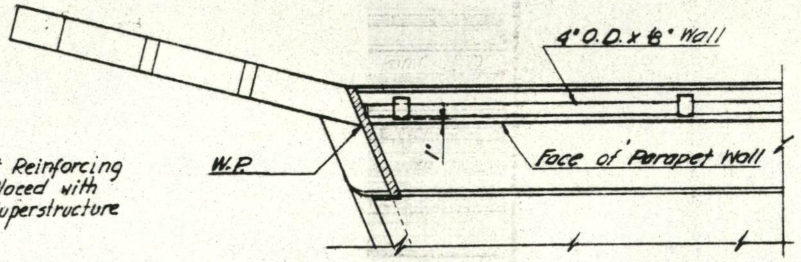


RAIL POST DETAILS

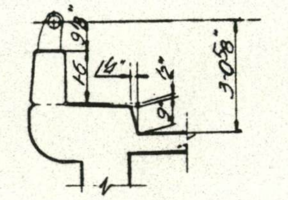
NOTE: Parapet Reinforcing to be Placed with Deck Superstructure



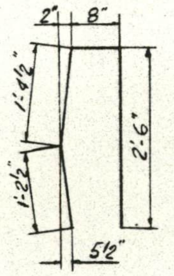
ELEVATION - END POST



PLAN - END POST



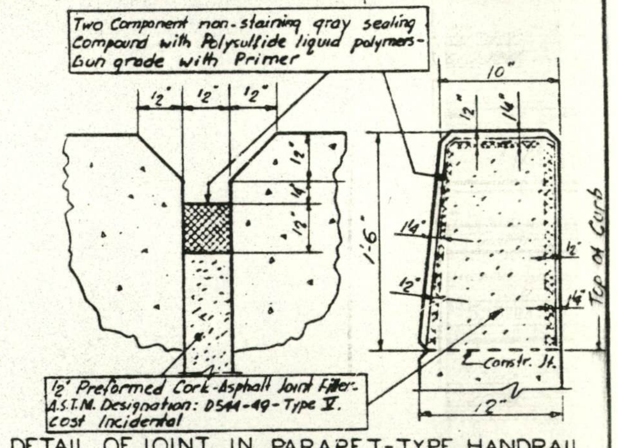
SECTION THRU CURB



a 40

BAR LIST						
Panel	Bar	No.	Size	Length	Spacing	Shape
All	a40	548	5	5-8	1-0	
A, B	b40	32	5	9-2	As Shown	
C	b41	48	5	11-8	"	
D, E	b42	104	5	10-10	"	

BILL OF MATERIAL		
Item	Unit	Quantity
Aluminum Handrail	Lin. Ft.	513
Class X Concrete	Cu. Yds.	26.1
Reinforcement Bars	Lbs	5,310



DETAIL OF JOINT IN PARAPET-TYPE HANDRAIL

NOTES:
All Posts shall be placed normal to parapet.
All Posts shall be of Aluminum conforming to A.S.T.M. Specification B-108 alloy SG-70B-T6.
All Rail Tubing shall be of Aluminum conforming to A.S.T.M. Specification B-235 alloy GS-11A-T6.
Alclad washers shall be made from sheet conforming to A.S.T.M. Specification B-209 alloy clad CG-42A-T4.
Rail Tubing may extend a max. of 3 panel lengths.
Set screws shall be of Aluminum conforming to A.S.T.M. Specification B-211 Alloy CG-42A-T4.
For material composition of Prefabricated Pad See Art. 54.9(d) (Bearings & Anchorage) of the Std. Specs.

NOTE: Fabric Pad & Cork Joint Materials Included in Cost of Class X Concrete

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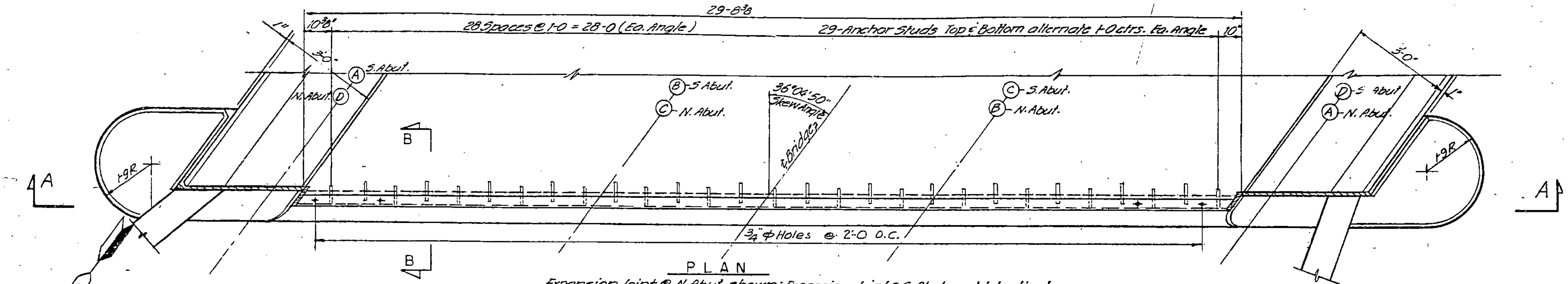
ILLINOIS DIVISION OF HIGHWAYS
CEMETERY ROAD OVER F.A.I. RT 74
FAI-74 SECTION 92-12HB
VERMILION COUNTY STA. 1971 + 24.72

HANDRAIL DETAILS

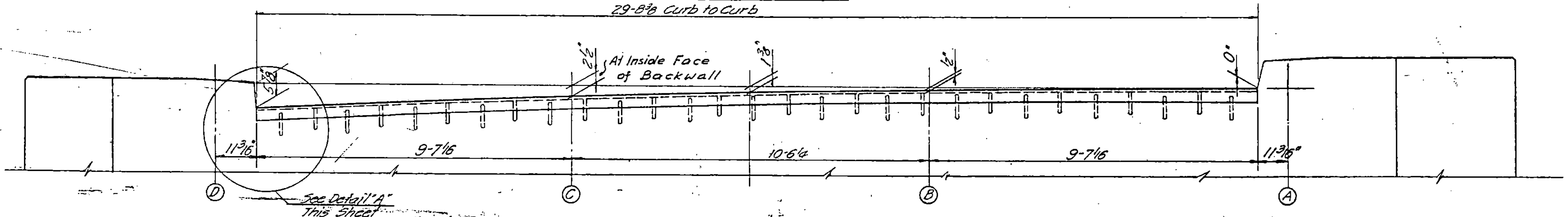
DESIGNED	DRAWN	TRACED	CHECKED	DEVISED	DATE	REVISED
J.H	DS	DS	JWH LDB	HSM	10-13-60	

F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	92-12HB	VERMILION	43	18
FEDERAL ROAD DISTRICT NO. 7	ILLINOIS	PROJ.		



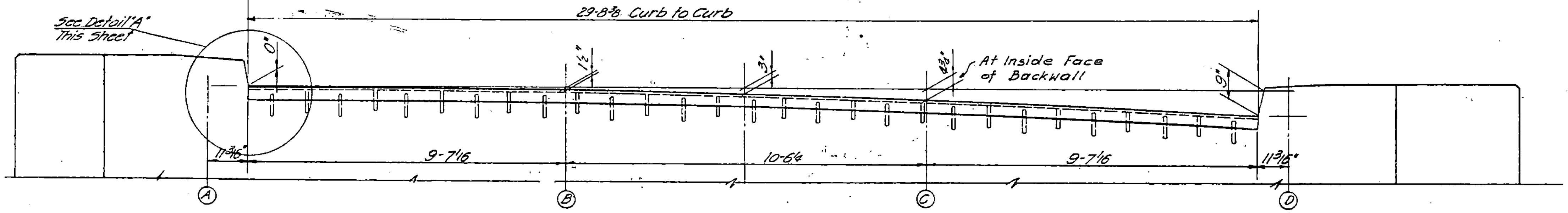
PLAN

Expansion Joint @ N. Abut. shown; Expansion Joint @ S. Abutment identical except as otherwise noted.



SECTION A-A

Expansion Joint @ South Abutment shown

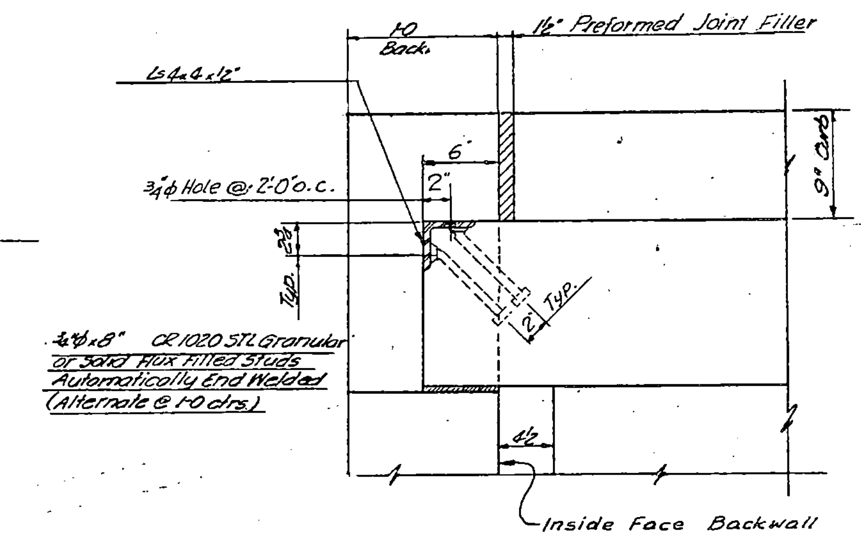


SECTION A-A

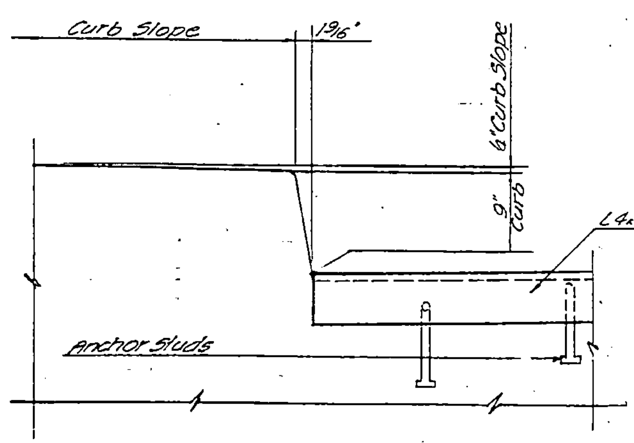
Expansion Joint @ North Abutment shown

EXPANSION JOINT DEVICES

(2 REQUIRED)



SECTION B-B



DETAIL "A"

TOTAL COMPUTED WEIGHT OF JOINT DEVICES

STRUCTURAL STEEL 830 LBS.

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ILLINOIS DIVISION OF HIGHWAYS

CEMETERY ROAD OVER FAI-RT. 74

FAI-74 SECTION 92-12HB

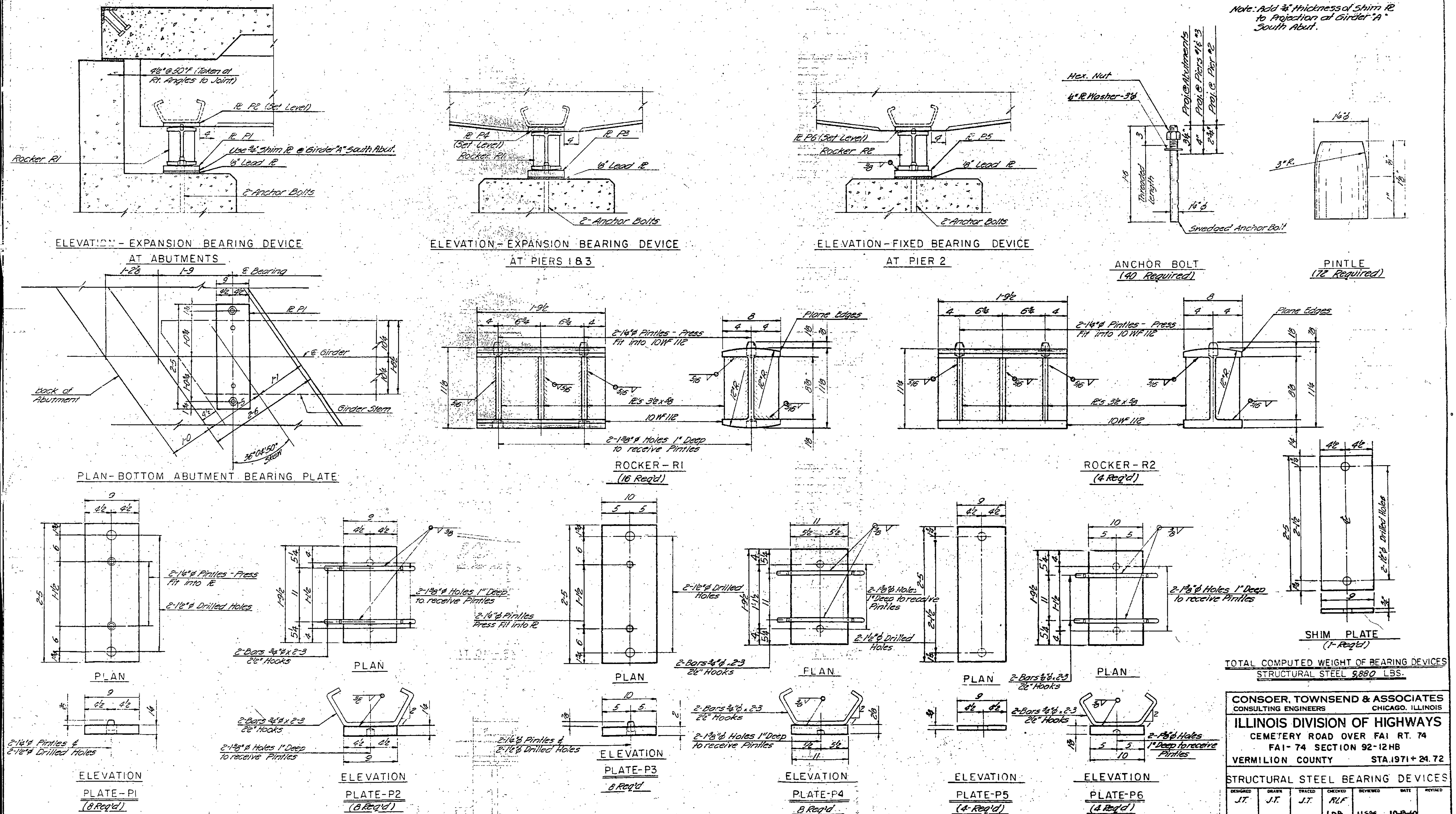
VERMILION COUNTY STA 1971+24.72

STRUCTURAL STEEL JOINT DETAILS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	CHECKED
J.T.	J.T.	J.T.	RLF			
			LDB	HSM	10-13-60	

F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	92-12HB	VERMILION	43	19
FEDERAL ROAD DISTRICT NO. 7		ILLINOIS	PROJ.	

Note: Add ¾" thickness of Shim ℞ to Projection at Girder "A" South Abut.



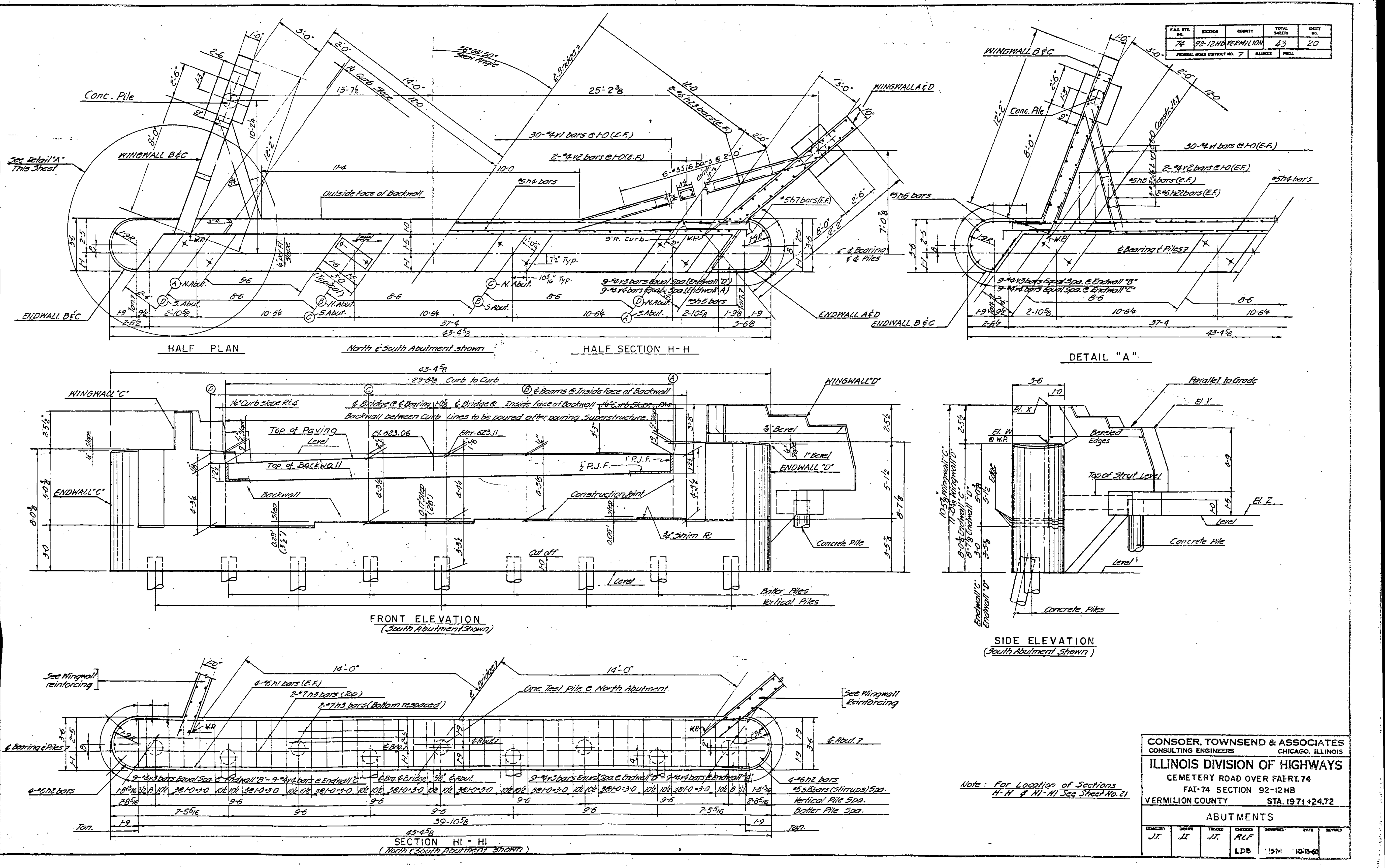
TOTAL COMPUTED WEIGHT OF BEARING DEVICES
STRUCTURAL STEEL 9,880 LBS.

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS — CHICAGO, ILLINOIS

ILLINOIS DIVISION OF HIGHWAYS
CEMETERY ROAD OVER FAI RT. 74
FAI-74 SECTION 92-12HB
VERMILION COUNTY — STA. 1971+24.72

STRUCTURAL STEEL BEARING DEVICES

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.T.	J.T.	J.T.	RLF / LDB	HSM	10-13-60	



F.A.I. RTE. NO. 74 | SECTION 92-12HB | COUNTY VERMILION | TOTAL SHEETS 43 | SHEET NO. 20
FEDERAL ROAD DISTRICT NO. 7 | ILLINOIS
HALF PLAN
North & South Abutment shown
HALF SECTION H-H
DETAIL "A"
Conc. Pile
WINGWALL B&C
WINGWALL A&D
See Detail "A" This Sheet
ENDWALL B&C
ENDWALL A&D
36°00'50" Skew Angle
℄ Bridge
¼" Curb Slope
Outside Face of Backwall
30-#4v1 bars @ 1'-0 (E.F.)
2-#4v2 bars @ 1'-0 (E.F.)
6-#5s16 bars @ 2'-0
#5h4 bars
#5h6 bars
#5h7 bars (E.F.)
#5h5 bars
9-#4v3 bars Equal Spa. (Endwall "D")
9-#4v4 bars Equal Spa. (Endwall "A")
9-#4v3 bars Equal Spa. @ Endwall "B"
9-#4v4 bars Equal Spa. @ Endwall "C"
2-#6h22 bars (E.F.)
℄ Bearing & Piles
9"R. Curb
Constr. Jt.
N. Abut.
S. Abut.
(Typical)
Level
7½" Typ.
25'-2⅜
37-4
43-4⅝
FRONT ELEVATION
(South Abutment Shown)
WINGWALL "C"
WINGWALL "D"
ENDWALL "C"
ENDWALL "D"
29-8⅜ Curb to Curb
℄ Beams @ Inside Face of Backwall
℄ Bridge @ ℄ Bearing
℄ Bridge @ Inside Face of Backwall
¼" Curb Slope Rt. 4
Backwall between Curb Lines to be poured after pouring Superstructure.
Top of Paving Level
Top of Backwall
El. 623.06
Elev. 623.11
½" P.J.F.
1" P.J.F.
¾" Bevel
1" Bevel
Backwall
Construction Joint
⅜" Shim PL
Concrete Pile
Cut off
Level
Batter Piles
Vertical Piles
SIDE ELEVATION
(South Abutment Shown)
Parallel to Grade
El. X
El. Y
El. W @ W.P.
El. Z
Beveled Edges
Top of Strut Level
Concrete Pile
Concrete Piles
Level
SECTION HI-HI
(North & South Abutment Shown)
See Wingwall reinforcing
See Wingwall Reinforcing
4-#6h1 bars (E.F.)
2-#7h3 bars (Top)
2-#7h3 bars (Bottom respaced)
One Test Pile @ North Abutment.
℄ Bearing & Piles
℄ Abut.
4-#6h2 bars
#5 s18 bars (Stirrups) Spa.
Vertical Pile Spa.
Batter Pile Spa.
Tan.
39-10⅝
43-4⅝
Note: For Location of Sections H-H & HI-HI See Sheet No. 21
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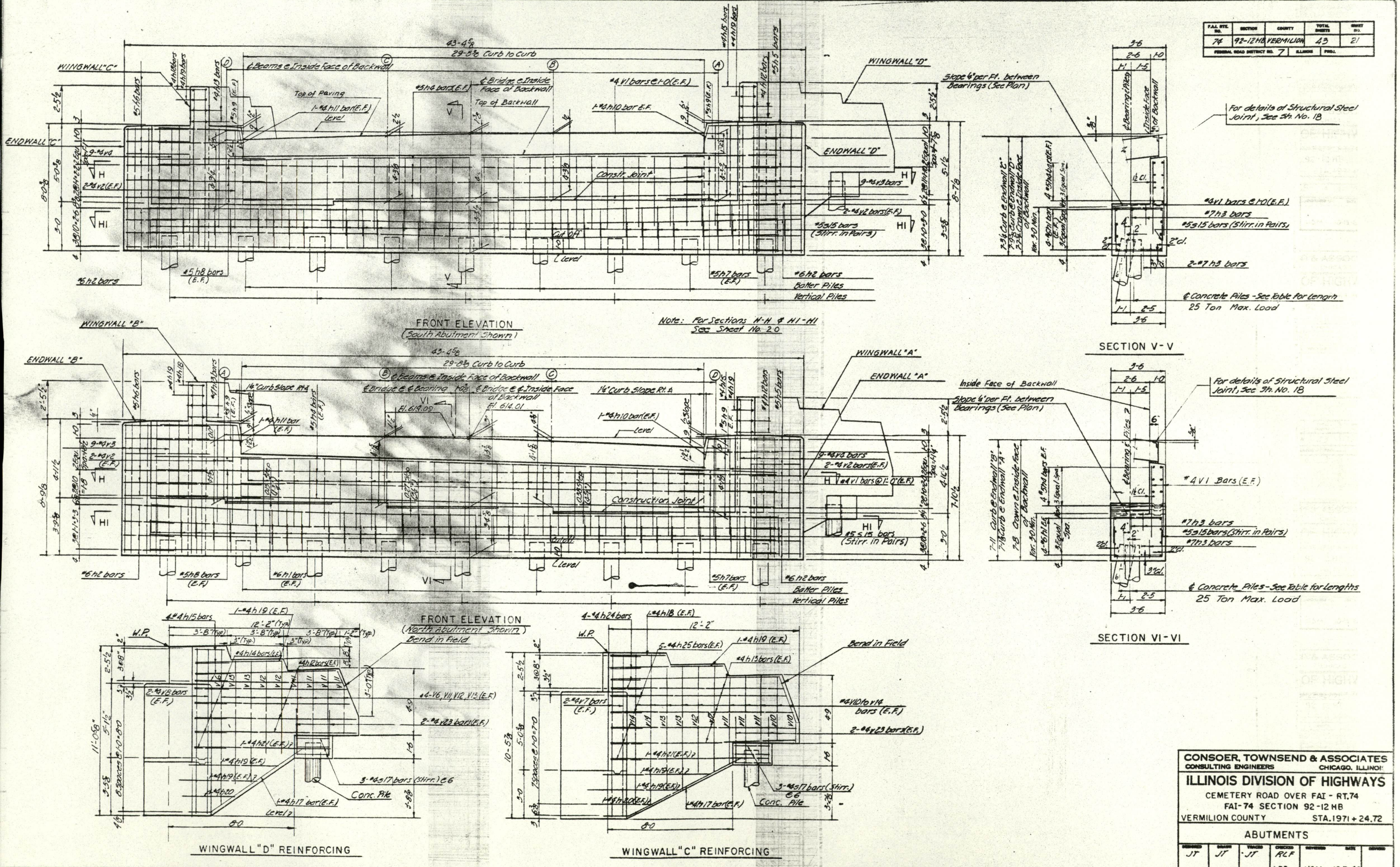
ILLINOIS DIVISION OF HIGHWAYS
CEMETERY ROAD OVER FAI-RT. 74
FAI-74 SECTION 92-12HB
VERMILION COUNTY STA. 1971+24.72
ABUTMENTS
J.T. | J.I. | J.T. | RLF | LDB | 10-13-60

F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	92-12HB	VERMILION	43	21
FEDERAL ROAD DISTRICT NO. 7	ILLINOIS	PROJ.		



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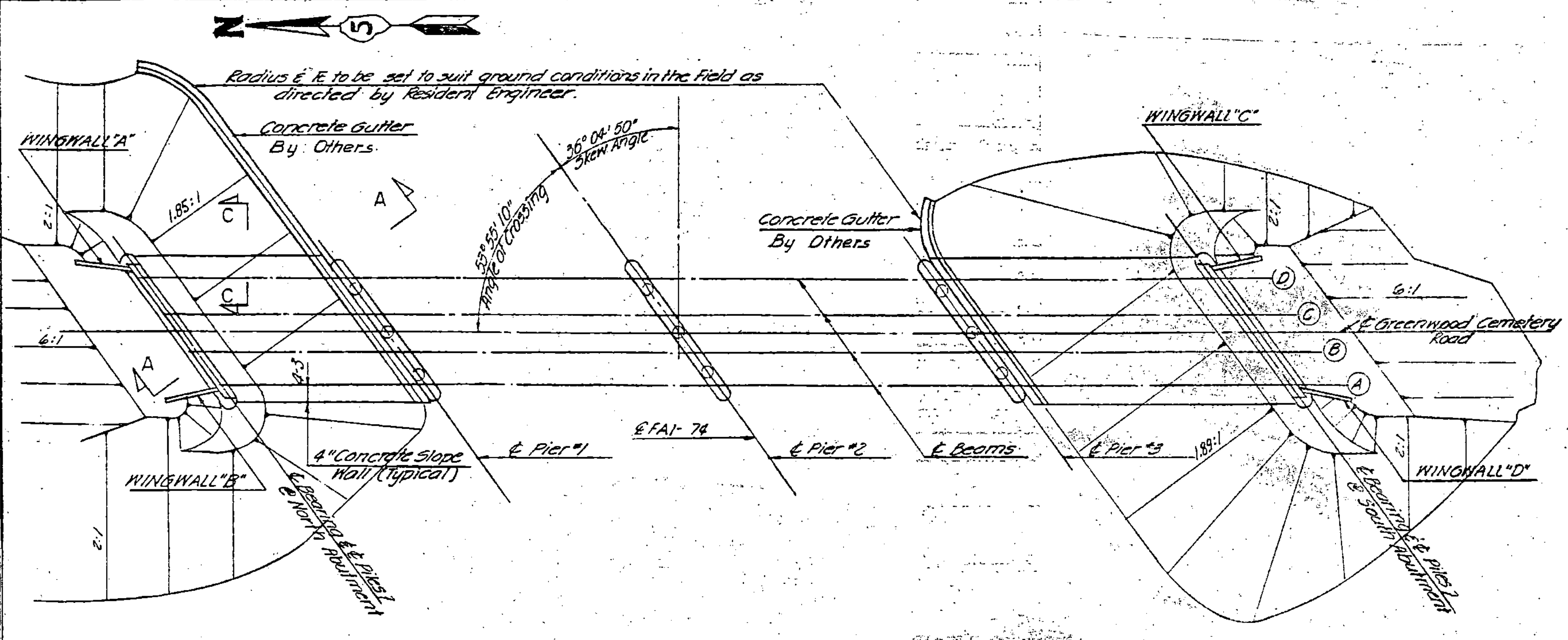
ILLINOIS DIVISION OF HIGHWAYS

CEMETERY ROAD OVER FAI - RT. 74
FAI-74 SECTION 92-12 HB
VERMILION COUNTY — STA. 1971 + 24.72

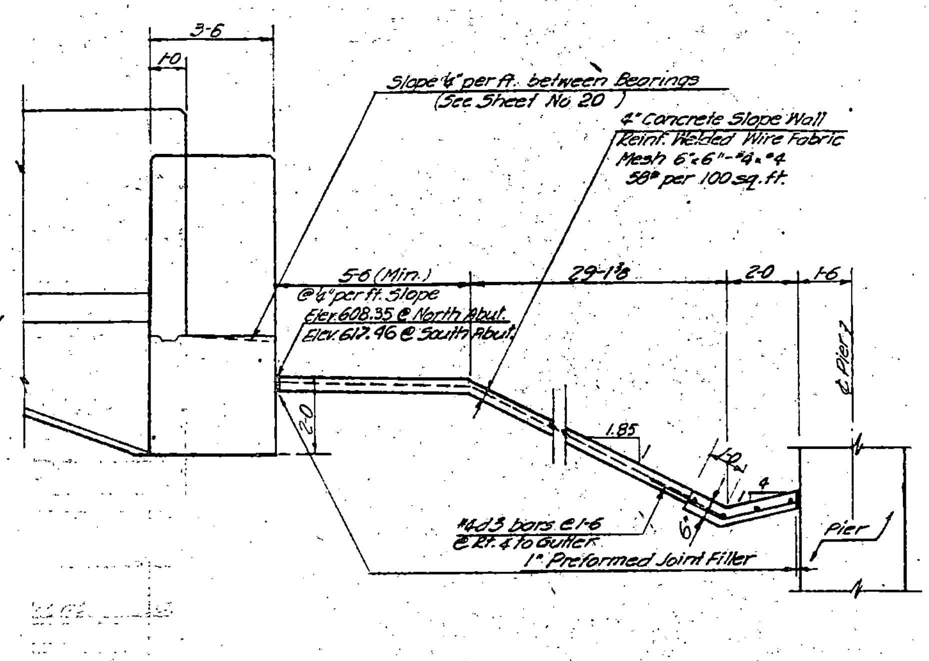
ABUTMENTS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JT	JT	JT	RLF			
			LDB	HSM	10-13-60	

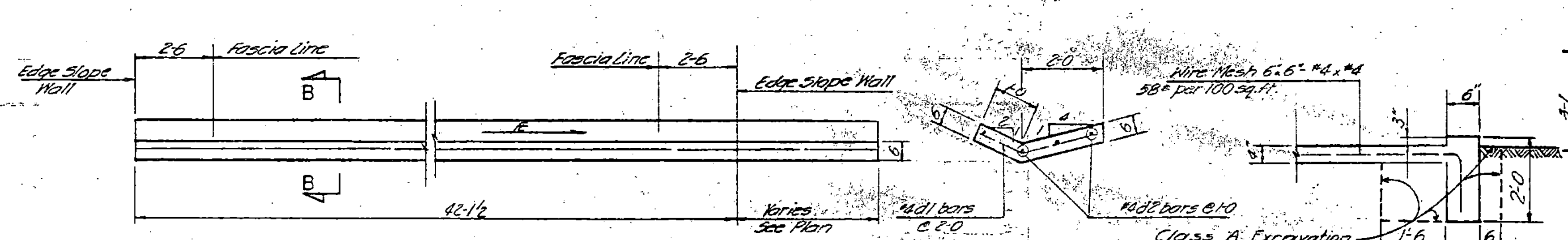
F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	92-12HB	VERMILION	43	22
FEDERAL ROAD DISTRICT NO. 7	ILLINOIS	PROJ.		



PLAN OF ABUTMENTS & CONCRETE GUTTERS



SECTION A-A



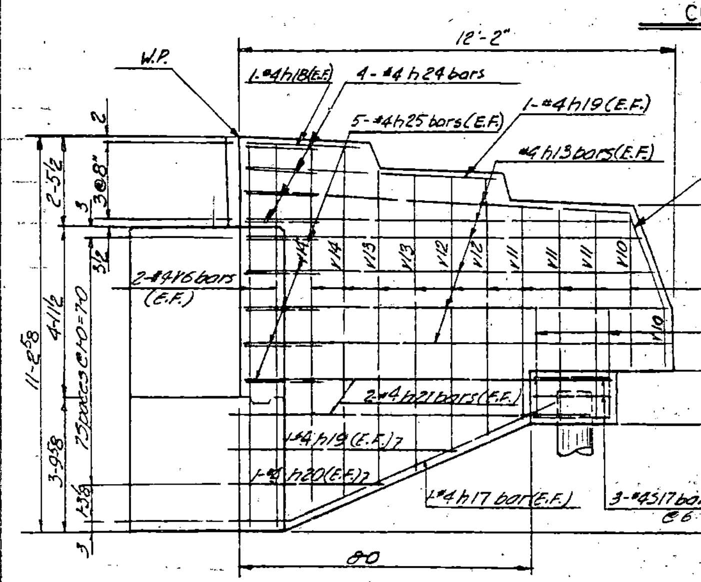
LONGITUDINAL SECTION

SECTION B-B

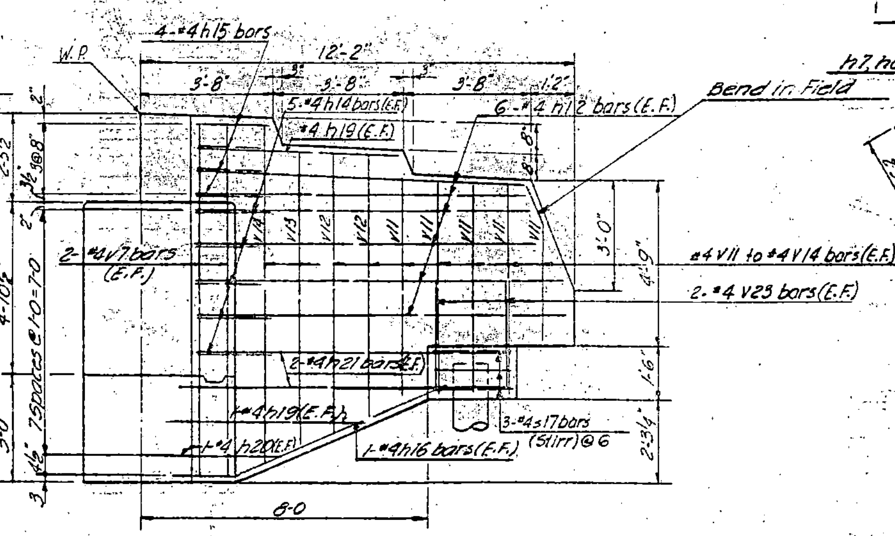
CONCRETE GUTTER

SECTION C-C

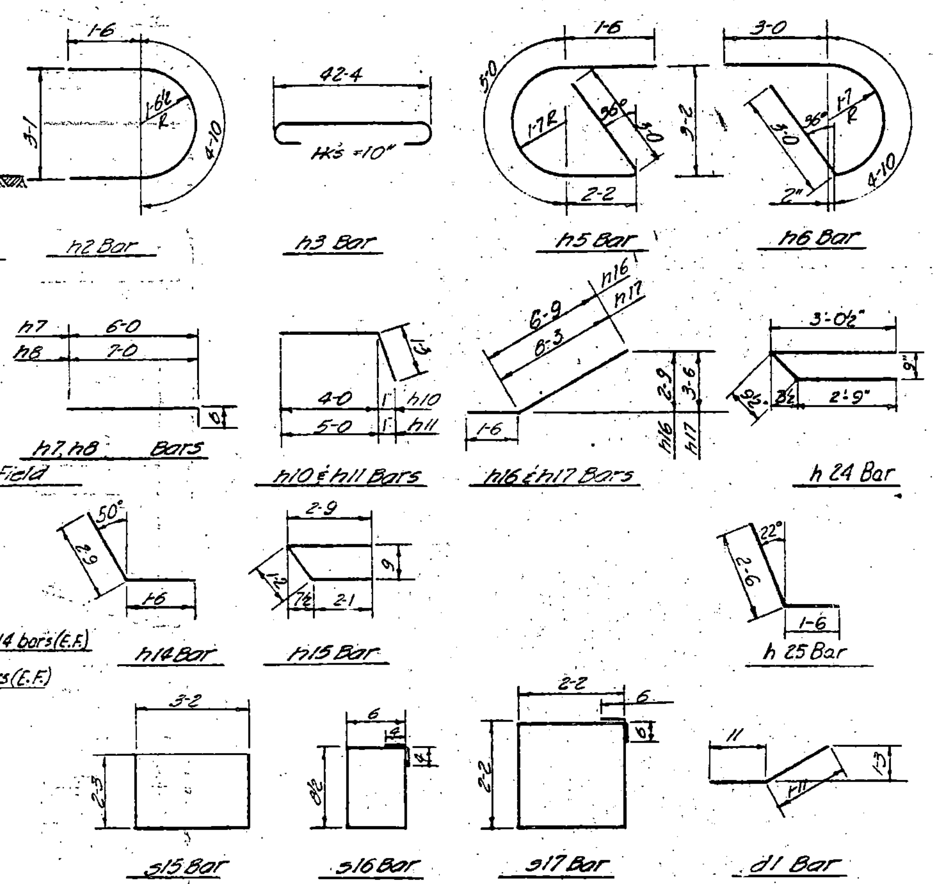
EDGE OF SLOPEWALL



WINGWALL "B" REINFORCING



WINGWALL "A" REINFORCING



BENDING DIAGRAMS

(All dimensions are out to out.)

BAR SCHEDULE					
Bar	No.	Size	Length	Spacing	Shape
h1	16	6	39-10	As Shown	
h2	16	6	7-10		
h3	8	7	44-0		
h4	16	5	29-5		
h5	12	5	11-8		
h6	12	5	10-10		
h7	16	5	6-6		
h8	16	5	7-6		
h9	8	5	4-0		
h10	4	4	5-3		
h11	4	4	6-3		
h12	24	4	9-6		
h13	24	4	10-6	As Shown	
h14	20	4	4-3	1-0	
h15	8	4	6-0	As Shown	
h16	2	4	8-3	As Shown	
h17	6	4	9-9	As Shown	
h18	4	4	3-4	1-0	
h19	4	4	6-0	1-0	
h20	8	4	4-0	1-0	
h21	12	4	8-9	1-0	
h22	8	6	8-6	As Shown	
h23	8	6	17-6	As Shown	
h24	8	4	6-7		
h25	10	4	4-0		
v1	120	4	4-6	1-0	
v2	16	4	6-6	1-0	
v3	18	4	8-3	As Shown	
v4	18	4	7-8	As Shown	
v6	6	4	10-8	As Shown	
v7	8	4	10-0	As Shown	
v8	4	4	10-8	1-0	
v10	8	4	4-6		
v11	30	4	6-0		
v12	16	4	7-0		
v13	14	4	8-0		
v14	10	4	9-6		
v23	16	4	3-0	As Shown	
s15	144	5	7-8	As Shown	
s16	18	3	3-1	2-0	
s17	12	3	9-8	6	
d1	44	4	2-10	2-0	
d2	16	4	21-6	As Shown	*
d3	60	4	2-6	1-6	
			* bend in Field		

ABUTMENT QUANTITIES	
Class X Concrete	57.1 Cu. Yds.
Reinforcement Bars	6,650 Lbs.

The above quantities are for two Abutments
Estimated Length of Concrete Gutter 84 Lin. Ft.

Concrete gutter included in quantity of slopewall

ESTIMATED LENGTHS & QUANTITIES OF PILES	
Abutment	Concrete Piles
North Abut.	10 @ 28 = 280 Lin. Ft.
South Abut.	11 @ 26 = 286 Lin. Ft.
Total	566 Lin. Ft.
Test Pile in North Abutment (one Each)	

TABLE OF ELEVATIONS															
Abutments	Berm Elev.	Bottom of Cap Beam Elev.	Crown Elev. Inside Face @ ℄ Backwall	Wingwall 'A' or 'C'				Wingwall 'B' or 'D'				Bearing Seat Elev. (Top Concrete)			
				W	X	Y	Z	W	X	Y	Z	A	B	C	D
North Abut	608.35	606.35	614.01	614.23	616.69	614.87	608.62	615.11	617.57	615.79	609.54	610.15	610.00	609.73	609.35
South Abut.	617.46	615.46	623.11	623.49	625.95	624.89	618.64	624.05	626.51	625.45	619.20	618.92*	618.92	618.75	618.46

* Use ¼" Shim Plate

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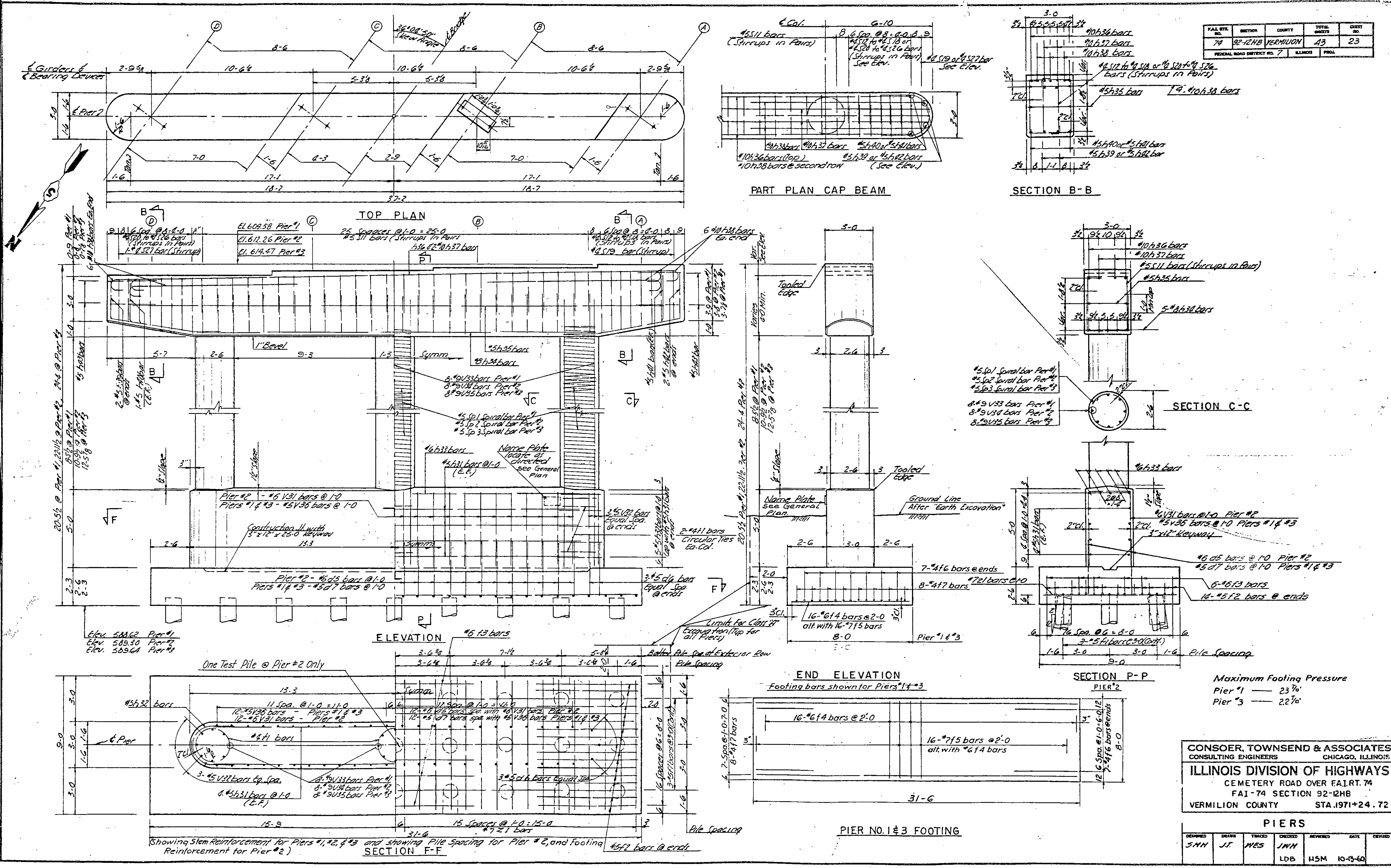
ILLINOIS DIVISION OF HIGHWAYS
CEMETERY ROAD OVER FAI RT. 74
FAI-74 SECTION 92-12HB
VERMILION COUNTY — STA. 1971+24.72

ABUTMENTS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
J.T.	J.T.	J.T.	RLF		
			LDB	HSM	10-13-60



F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	92-12HB	VERMILION	43	23
FEDERAL ROAD DISTRICT NO. 7 ILLINOIS PROJ.
TOP PLAN
PART PLAN CAP BEAM
SECTION B-B
SECTION C-C
ELEVATION
END ELEVATION
Footing bars shown for Piers #1 & #3
SECTION P-P
PIER #2
SECTION F-F
(Showing Stem Reinforcement for Piers #1, #2, & #3 and showing Pile Spacing for Pier #2, and Footing Reinforcement for Pier #2)
PIER NO. 1 & 3 FOOTING
One Test Pile @ Pier #2 Only
Limit for Class "A" Excavation (Typ. for all Piers)
Name Plate locate as directed see General Plan
Construction Jt. with 3"x12"x25-0 Keyway
Elev. 588.62 Pier #1
Elev. 589.30 Pier #2
Elev. 589.64 Pier #3
El. 609.58 Pier #1
El. 612.26 Pier #2
El. 614.47 Pier #3
36°00'50" Skew Angle
Maximum Footing Pressure
Pier #1 —— 23 T/□'
Pier #3 —— 22 T/□'
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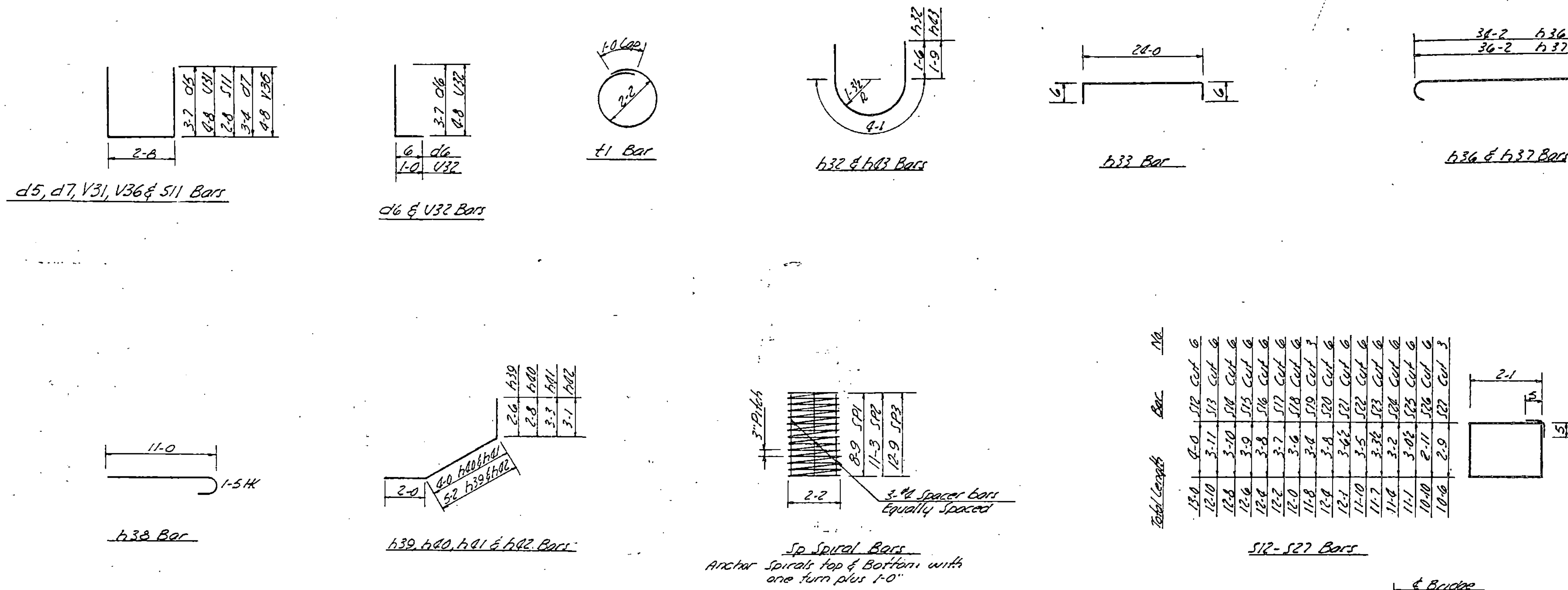
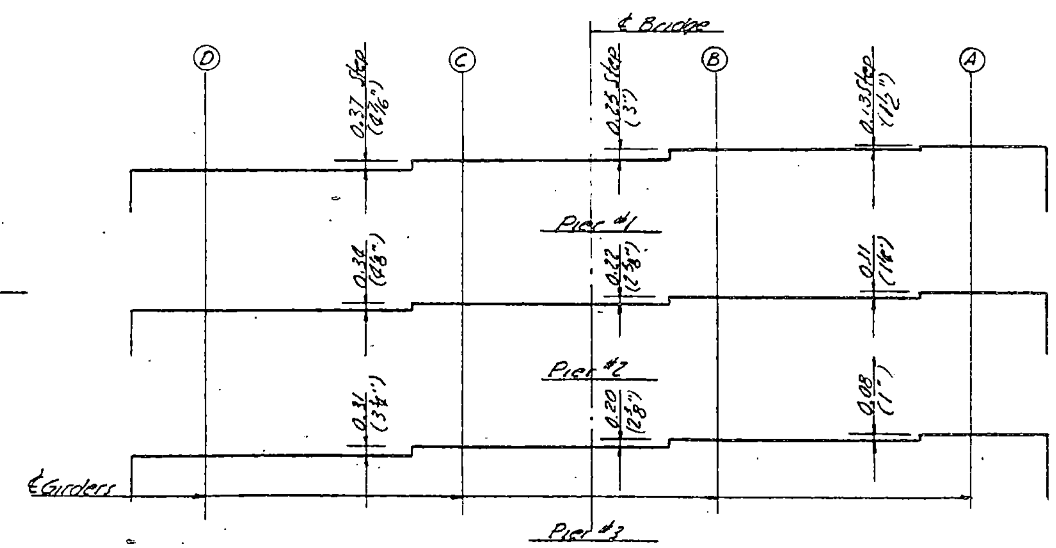
ILLINOIS DIVISION OF HIGHWAYS
CEMETERY ROAD OVER F.A.I.RT. 74
FAI-74 SECTION 92-12HB
VERMILION COUNTY STA. 1971+24.72
PIERS
DESIGNED SMH
DRAWN JT
TRACED WES
CHECKED JWH LDB
REVISED HSM
DATE 10-13-60

F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	92-12HB	VERMILION	43	24
FEDERAL ROAD DISTRICT NO. 7	ILLINOIS	PROJ.		



BENDING DIAGRAMS
(All Dimensions are Out to Out)



BEARING SEAT STEPS

BEARING SEAT ELEV. (TOP OF CONCRETE)				
Pier	D	C	B	A
Pier #1	608.83	609.20	609.45	609.58
Pier #2	611.59	611.93	612.15	612.26
Pier #3	613.88	614.19	614.39	614.47

ESTIMATED LENGTHS & QUANTITIES TIMBER PILES	
Pier #2	26 @ 15' = 390 Lin. Ft.
Total	390 Lin. Ft.
Test Pile @ Pier #2 only	

BAR SCHEDULE						
Piers	Bar	No.	Size	Length	Spacing	Shape
2	f1	3	5	31-0	As Shown	
2	f2	28	5	6-0	As Shown	
2	f3	6	6	10-0	As Shown	
2	z1	32	7	8-6	1-0	
2	d5	24	6	9-10	1-0	
1,2,&3	d6	18	5	4-1	Eq. Spa.	
1&3	d7	48	5	9-4	1-0	
2	V31	24	6	12-0	1-0	
1,2,&3	V32	18	5	5-8	Eq. Spa.	
1	V33	24	9	16-0	Eq. Spa.	
2	V34	24	9	18-3	Eq. Spa.	
3	V35	24	9	20-0	Eq. Spa.	
1&3	V36	48	5	12-0	1-0	
1,2,&3	t1	18	4	7-10	As Shown	
1,2&3	h31	24	5	23-6	1-0	
1,2&3	h32	30	5	7-1	1-0	
1,2&3	h33	15	6	25-0	As Shown	
1,2&3	h34	15	8	26-0	As Shown	
1,2&3	h35	6	5	34-3	As Shown	
1,2&3	h36	6	10	37-0	As Shown	
1,2&3	h37	6	10	39-0	As Shown	
1,2&3	h38	42	10	12-5	As Shown	
1,2&3	h39	6	5	9-8	As Shown	
1,2&3	h40	6	5	8-8	As Shown	
1,2&3	h41	6	5	9-3	As Shown	
1,2&3	h42	6	5	10-3	As Shown	
1,2&3	h43	12	5	7-7	As Shown	
1,2&3	S11	156	5	8-0	1-0	
1,2&3	S12-S19	*	4	*	0-8	
1,2&3	S20-S27	*	4	*	0-8	
1	SP1	3	5	*	As Shown	
2	SP2	3	5	*	As Shown	
3	SP3	3	5	*	As Shown	
2&3	f4	32	6	7-6	As Shown	
2&3	f5	32	7	7-6	As Shown	
2&3	f6	28	4	6-0	As Shown	
2&3	f7	16	4	31-0	As Shown	

PIER QUANTITIES		
Class X Concrete	180.5	Cu. Yds.
Reinforcement Bars	20,760	Lbs

Note: Quantities are shown for 3 Piers

* See Bending Diagrams.

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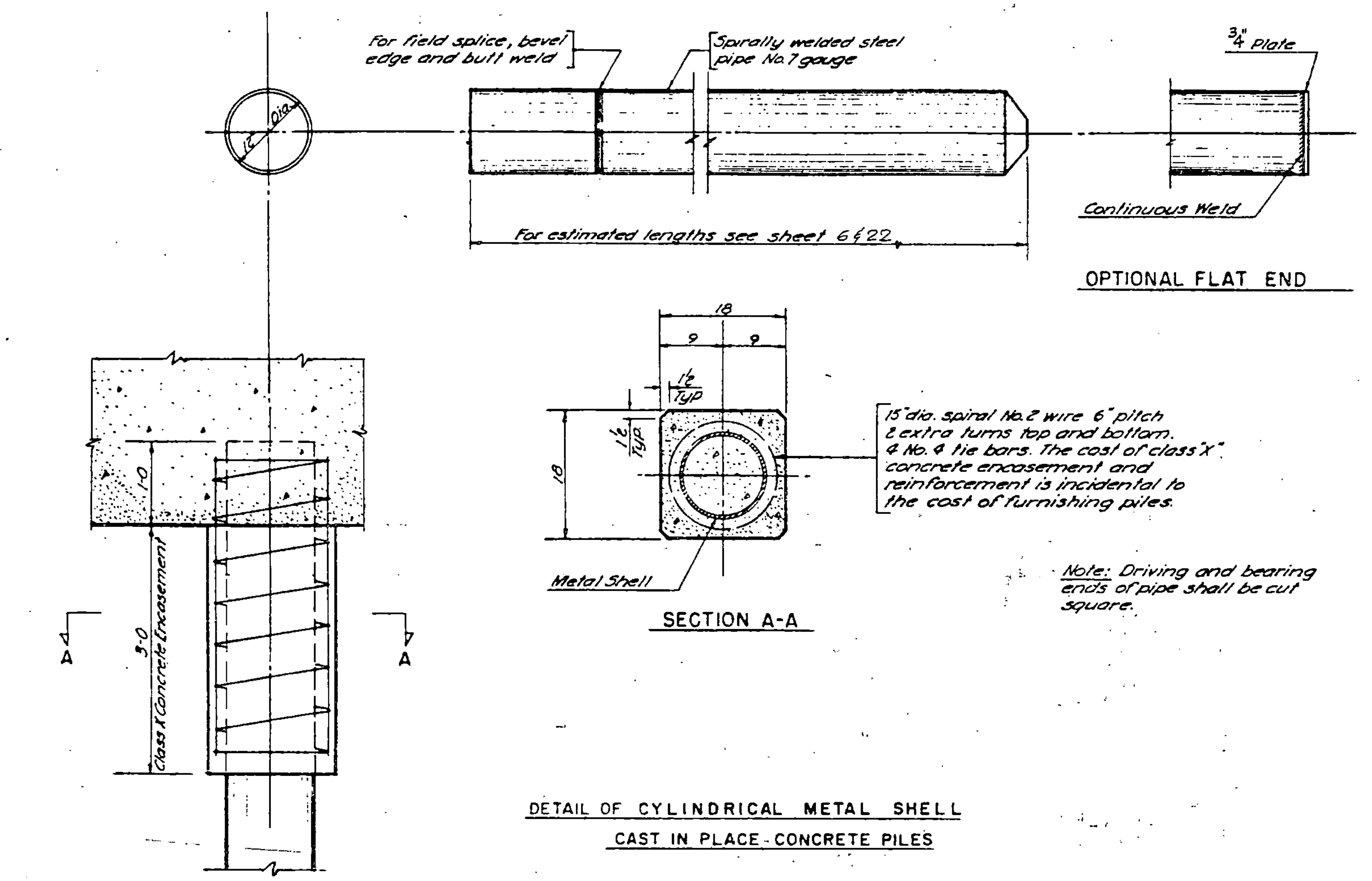
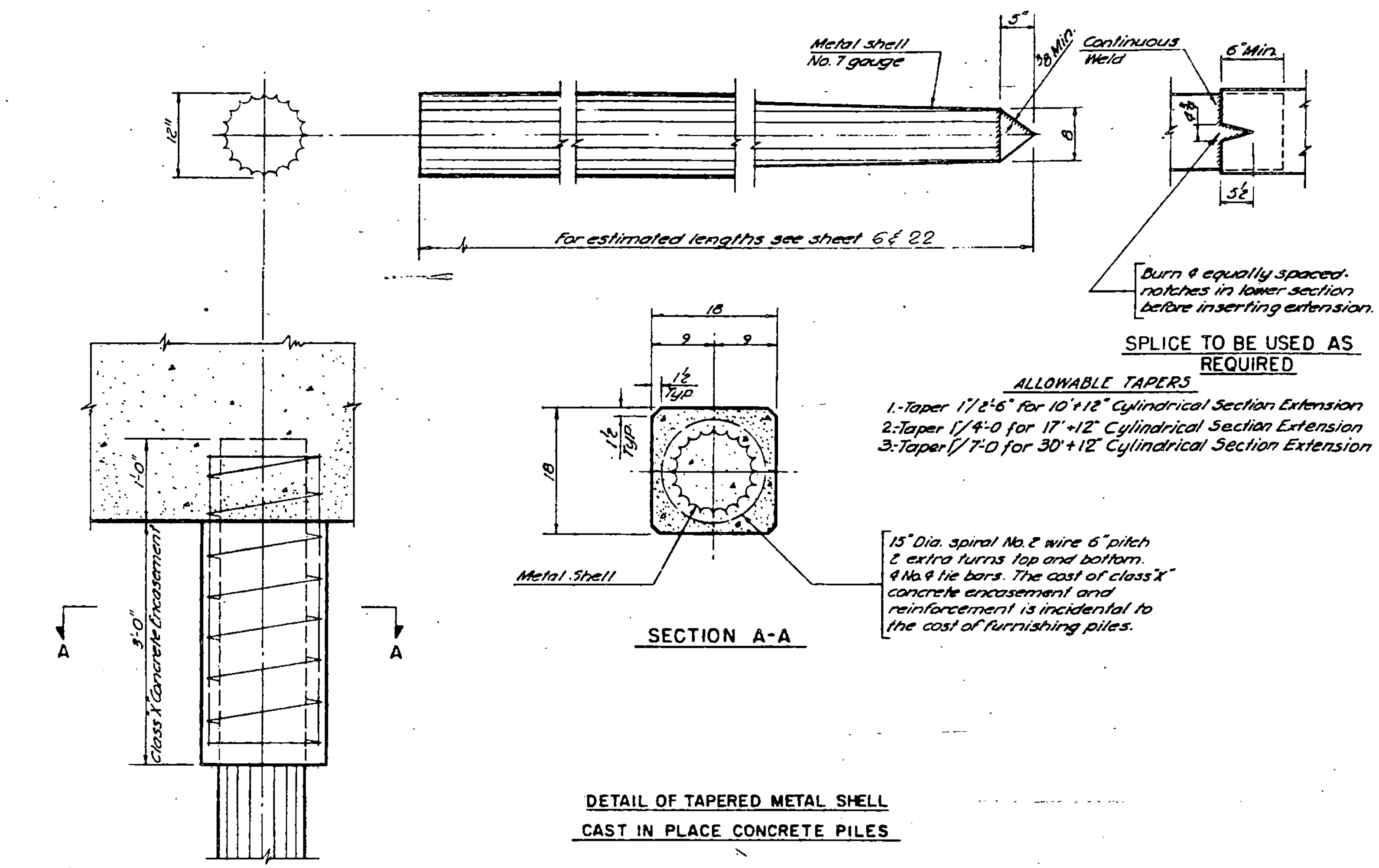
ILLINOIS DIVISION OF HIGHWAYS
CEMETERY ROAD OVER FAI RT. 74
FAI-74 SECTION 92-12HB
VERMILION COUNTY — STA.1971+24.72

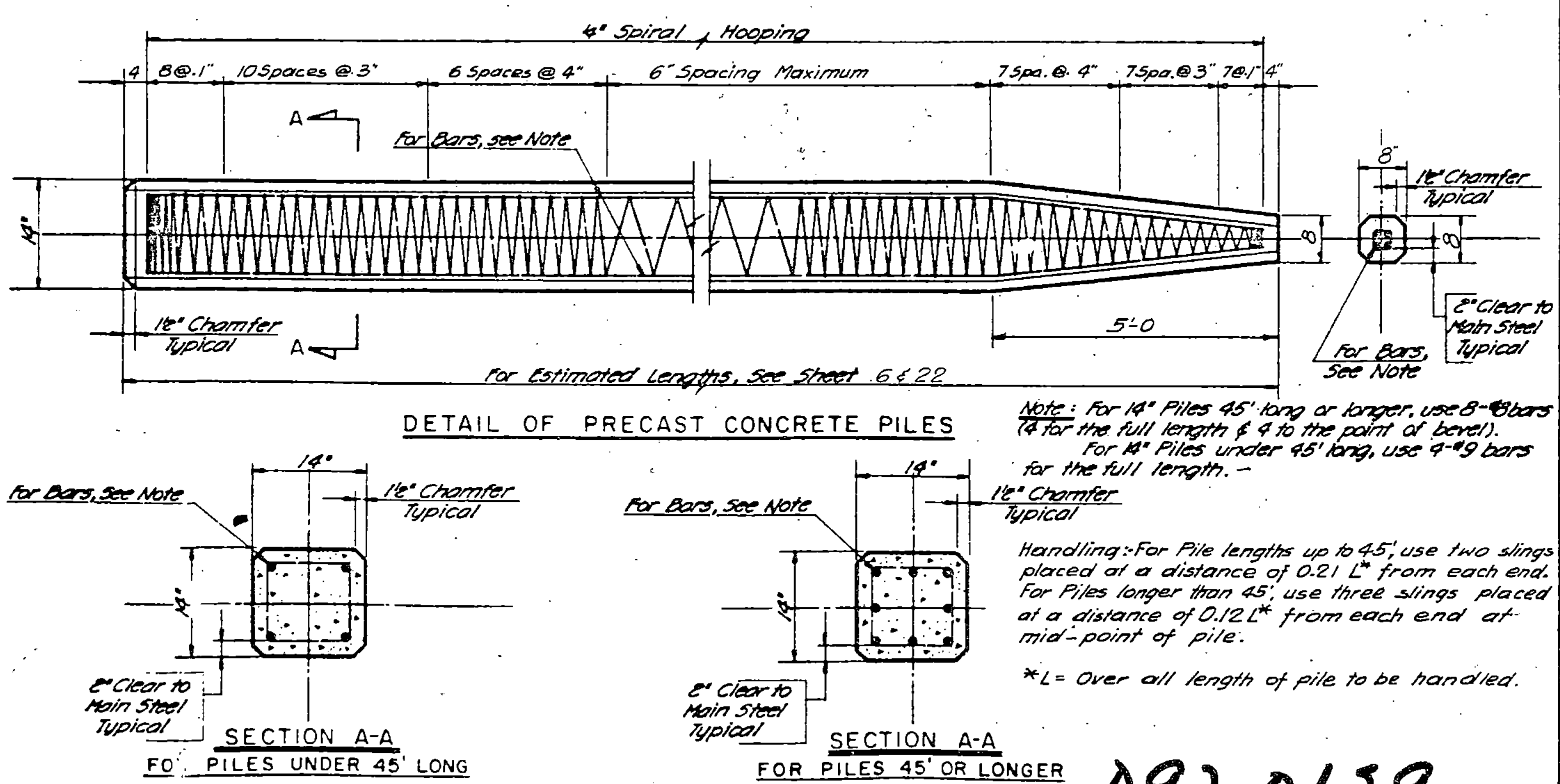
PIERS

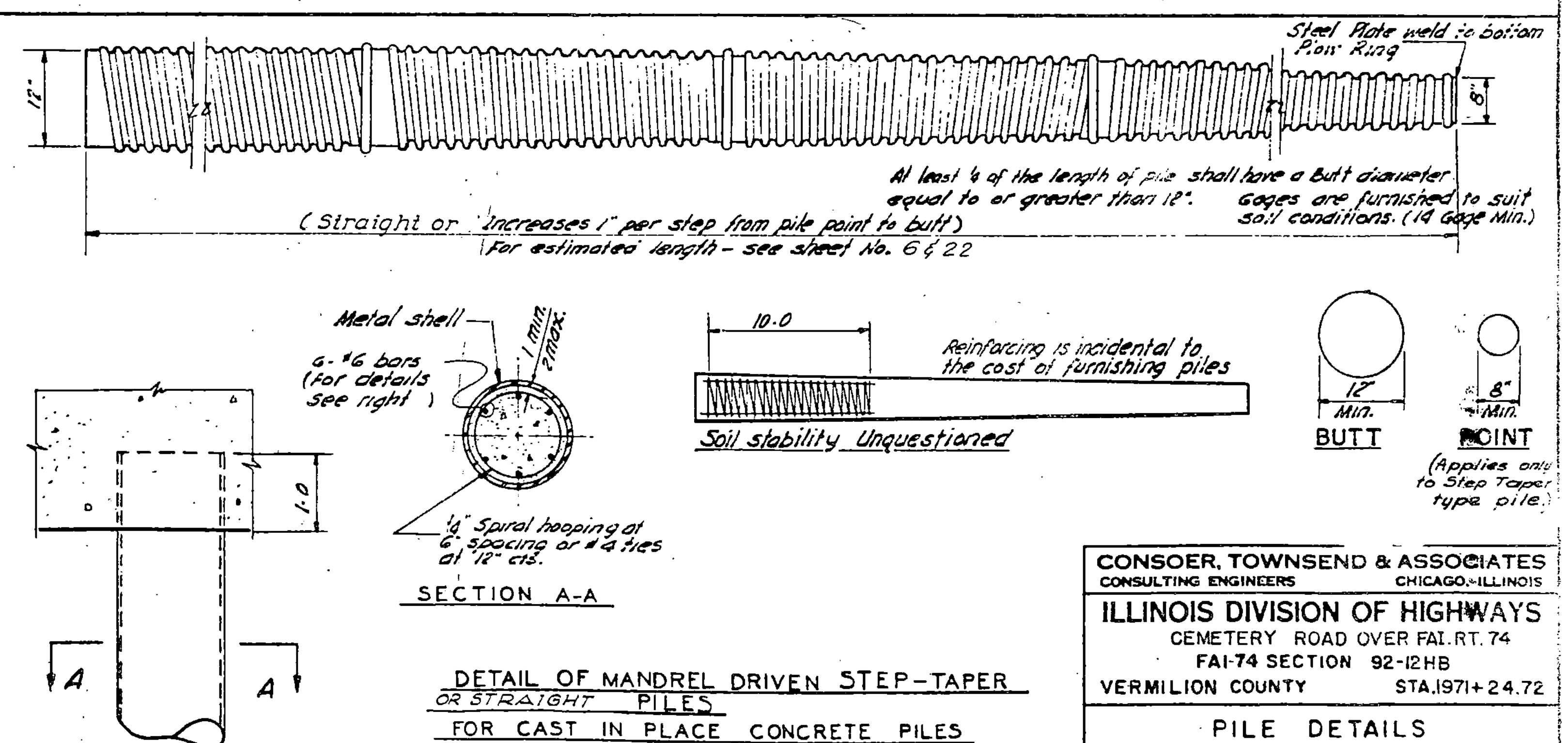
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SMH	J.T.	WES	JWH / LDB	HSM	10-18-60	

F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	92-12 HB	VERMILION	43	25
FEDERAL ROAD DISTRICT NO. 7			ILLINOIS / FED.	









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ILLINOIS DIVISION OF HIGHWAYS
CEMETERY ROAD OVER FAI. RT. 74
FAI-74 SECTION 92-12HB
VERMILION COUNTY STA.1971+24.72

PILE DETAILS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	GEE	BB	LDB	HSM	6-1-61	